Prepared by D. Margaret Seaman

Date of Search: 05 September 2006 at 14:42

Strategy:

(FILE 'HOME' ENTERED AT 14:42:37 ON 05 SEP 2006)

FILE 'REGISTRY' ENTERED AT 14:42:48 ON 05 SEP 2006
L1 STRUCTURE UPLOADED
L2 45 S L1 SAM
L3 2405 S L1 FULL

FILE 'CA' ENTERED AT 14:43:11 ON 05 SEP 2006
L4 592 S L3

FILE 'REGISTRY' ENTERED AT 14:43:53 ON 05 SEP 2006
L5 STRUCTURE UPLOADED
L6 1402 S L5 FULL

FILE 'CA' ENTERED AT 14:44:18 ON 05 SEP 2006
L7 226 S L6
L8 137127 S ANTIBACT? OR ANTIVIR?
L9 25 S L7 AND L8
L10 201 S L7 NOT L9
L11 183 S L10 AND PY<2003
L12 78 S L11 AND (DRUG? OR TREAT?)

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

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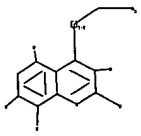

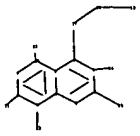

chain nodes :
11 12 13 14 15 17 18 19
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
3-17 4-14 5-15 7-12 8-11 10-13 17-18 18-19
ring bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10
exact/norm bonds :
18-19
exact bonds :
3-17 4-14 5-15 7-12 8-11 10-13 17-18
normalized bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10
isolated ring systems :
containing 1 :

G1:C,N

G2:Cb,Cy,Hy

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS

```
L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
/ Structure 1 in file .gra /


Structure attributes must be viewed using STN Express query preparation.


=> s l1 sam
SAMPLE SEARCH INITIATED 14:43:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     5164 TO ITERATE

 38.7% PROCESSED     2000 ITERATIONS                                 45 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         98971 TO   107589
PROJECTED ANSWERS:             1677 TO     2969

L2            45 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 14:43:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   103283 TO ITERATE

100.0% PROCESSED   103283 ITERATIONS                             2405 ANSWERS
SEARCH TIME: 00.00.01

L3          2405 SEA SSS FUL L1

=> s l3
L4          592 L3

=>
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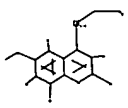
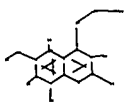




```
chain nodes :
11 12 13 14 15 17 18 19 24 25
ring nodes :
1 2 3 4 5 6 7 8 9 10
```

```
chain bonds :
3-17 4-14 5-15 7-12 8-11 9-24 10-13 17-18 18-19 24-25
ring bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10
exact/norm bonds :
9-24 18-19 24-25
exact bonds :
3-17 4-14 5-15 7-12 8-11 10-13 17-18
normalized bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10
isolated ring systems :
containing 1 :


G1:C,N

G2:Cb,Cy,Hy

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 24:CLASS 25:CLASS



L5      STRUCTURE UPLOADED

=> d l5
L5 HAS NO ANSWERS
L5              STR

/ Structure 2 in file .gra /


Structure attributes must be viewed using STN Express query preparation.


=> s l5 full
FULL SEARCH INITIATED 14:44:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    14098 TO ITERATE

100.0% PROCESSED    14098 ITERATIONS                          1402 ANSWERS
SEARCH TIME: 00.00.04

L6         1402 SEA SSS FUL L5

=> s l6
L7          226 L6

=> s antibact? or antivir?
         86620 ANTIBACT?
         54184 ANTIVIR?
L8      137127 ANTIBACT? OR ANTIVIR?

=> s l7 and l8
L9           25 L7 AND L8

=> d ibib abs fhitstr 1-25
```

L9 ANSWER 1 OF 25 CA COPYRIGHT 2006 ACS on STN

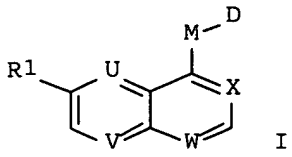
Accession Number
144:350718 CA Full-text
Title
Preparation of bicyclic antibiotics, particularly quinoline, naphthyridine, quinazoline and quinoxaline antibacterials
Author/Inventor
Hubschwerlen, Christian; Surivet, Jean-Philippe; Zumbrunn Acklin, Cornelia
Patent Assignee/Corporate Source
Actelion Percurex AG, Switz.
Source
PCT Int. Appl., 281 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006032466	A2	20060330	WO 2005-EP10154	20050920

Patent Number (1)
WO 2006032466
Patent Publication Date (1)
20060330
Application Number (1)
WO 2005-EP10154
Application Date (1)
20050920
Priority Application Information

WO 2004-EP10762	20040924
WO 2005-EP7731	20050715

Priority Patent Number (1)
WO 2004-EP10762
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20040924
Priority Patent Number (2)
WO 2005-EP7731
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
20050715
Other Source
MARPAT 144:350718
Graphics



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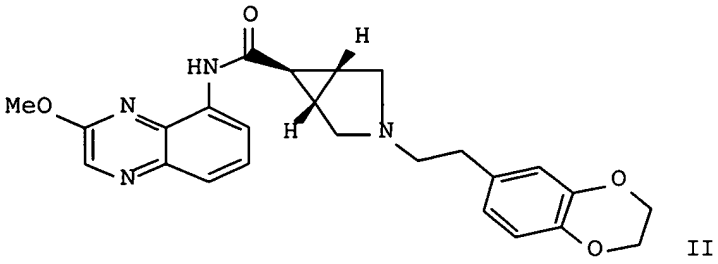


II

Abstract

Title compds. I [R1 = alkyl, halo/alkoxy, halo, CN; 1-2 of U, V, W, and X = N, the remaining = CH, or in case of U, V, and/or W may also represent CRa, and, in the case of X, may also represent CRb; Ra = halo; Rb = halo, alkoxy; D = alkyl, hetero/aryl; M = -A11-3-azabicyclo[3.1.0]hex-3-yl-A21-, (un)substituted -A3-tetrahydropyran-3-ylamino-A4-; -A1-1,3-dioxolo[4,5- c]pyran-7-yl-A2-, etc.; A11 = NHCO, OCH2, CH(OH) CH2, CH2CH2; A21 = CH2, CO, CH(OH), CH(OCONH2); A3 = NHCO, CH2CH2, CH:CH, etc.; A4 = CH2, CO, COCH:CH, etc.; A1 = NHCO, OCH2, CH2CH2, CH:CH, CH(OH)CH2; A2 = NHCH2, NHCO, COCH2, NHCH2CONH, etc.; and their prodrugs, tautomers, racemates, and their stereoisomers, and their meso and morphol. forms, salts and solvent complexes] were prepared for use in the treatment of bacterial infections. Thus, (1α,5α,6α)-II was prepared from (1α,5α,6α)-3-azabicyclo[3.1.0]hexane-3,6-dicarboxylic acid 3-benzyl ester and trifluoromethanesulfonic acid 3-methoxyquinoxalin- 5-yl ester. Selected I ar active against a wide range of bacteria, including Gram-neg. and Gram-pos. bacteria and displayed min. inhibitory concentration values ≤ 0.031 mg/L.

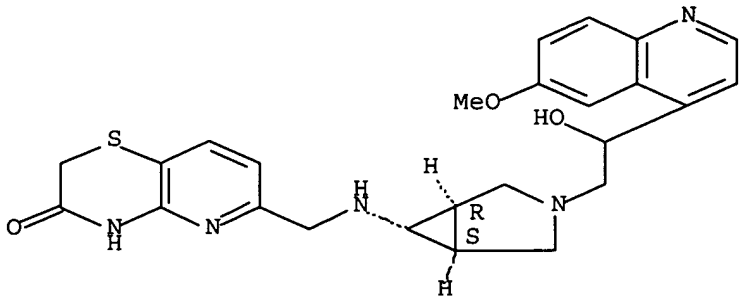
Controlled or Index Terms

881653-50-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bactericide; preparation of bicyclic antibacterials)

Hit Structure

CAS Registry Number
881653-50-5 CA

Chemical or Trade Name
2H-Pyrido[3,2-b]-1,4-thiazin-3(4H)-one, 6-[[[(1α,5α,6α)-3-[2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]-3-azabicyclo[3.1.0]hex-6-yl]amino]methyl]- (9CI) (CA INDEX NAME)



Stereochemistry
Relative stereochemistry.

L9 ANSWER 2 OF 25 CA COPYRIGHT 2006 ACS on STN
Accession Number
144:108362 CA Full-text
Title
Preparation of naphthalenes, quinolines, quinoxalines and naphthyridines as antibacterial agents
Author/Inventor
Miller, William Henry; Pendrak, Israil; Seefeld, Mark Andrew
Patent Assignee/Corporate Source
Glaxo Group Limited, UK
Source
PCT Int. Appl., 275 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006002047	A2	20060105	WO 2005-US20950	20050615
WO 2006002047	A3	20060323		

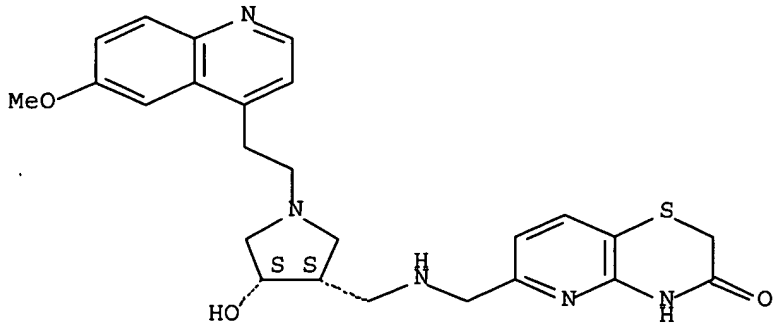
Patent Number (1)
WO 2006002047
Patent Publication Date (1)
20060105
Application Number (1)
WO 2005-US20950
Application Date (1)
20050615
Patent Number (2)
WO 2006002047
Patent Publication Date (2)
20060323
Priority Application Information

US 2004-579873P	20040615

Priority Patent Number (1)
US 2004-579873P
Priority Kind Code (1)
P
Priority Patent Publication Date (1)
20040615
Other Source
MARPAT 144:108362
Graphics
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Abstract
Title compds. I [Z1, Z3, Z4 = independently N, CR1a; Z2, Z5, Z6 = CR1a; R1, R1a = independently at each occurrence H, CN, halo, OH and derivs., alkyl, NO2, acyl, etc.; or R1 and R1a of Z2 or R1 and R1a of Z1 together form ethylenedioxy; A = CR2R3; R2 = H, halo, OH, acyloxy, alkoxy; R3 = H; W1 = CR4R5; R4 = H, halo, OH, hydroxy/alkyl, etc.; R5 = H, alkyl; or R4R5 = :N-OH; W2 = CH and derivs.; B = CR7R8, a bond; R7, R8 = independently H, alkyl; R9 = H, hetero/aryl, (un)substituted alkyl, etc.; R10 = -U-R11; U = CO, SO2, CH2 and derivs.; R11 = (un)substituted bicyclic carbocyclic or heterocyclic ring; and their pharmaceutically acceptable salts and solvates], useful in the treatment of bacterial infections in mammals, particularly humans, are prepared and disclosed. Thus, reductive amination of 3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazine-6-carboxaldehyde (preparation given) with [[(3S)-1-[2-[6-(methyloxy)-1,5-naphthyridin-4- yl]ethyl]-3-pyrrolidinyl]methyl]amine (preparation given) gave naphthyridine II. I are active against a wide range of organisms including both Gram-neg. and Gram-pos. organisms and displayed min. inhibitory concentration values ≤ 20 mg/mL.
Controlled or Index Terms
872717-02-7P, 6-[[[[(3S,4S)-4-Hydroxy-1-[2-[6-(methyloxy)quinolin-4-yl]ethyl]-3-pyrrolidinyl]methyl]amino]methyl]-2H-pyrido[3,2-b][1,4]thiazin-3(4H)-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of naphthalenes, quinolines, quinoxalines and naphthyridines as antibacterial agents)
Hit Structure

CAS Registry Number
872717-02-7 CA

Chemical or Trade Name
2H-Pyrido[3,2-b]-1,4-thiazin-3(4H)-one, 6-[[[[(3S,4S)-4-hydroxy-1-[2-(6-methoxy-4-quinolinyl)ethyl]-3-pyrrolidinyl]methyl]amino]methyl]- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L9 ANSWER 3 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
143:307 CA Full-text

Title
Atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints: a promising approach for modeling of antibacterial activity

Author/Inventor
Marrero-Ponce, Yovani; Medina-Marrero, Ricardo; Torrens, Francisco; Martinez, Yamile; Romero-Zaldivar, Vicente; Castro, Eduardo A.

Patent Assignee/Corporate Source
Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, 54830, Cuba

Source
Bioorganic & Medicinal Chemistry (2005), 13(8), 2881-2899 CODEN: BMECEP; ISSN: 0968-0896

Document Type
Journal

Language
English

Abstract
The Topol. Mol. Computer Design (TOMOCOMD-CARDD) approach has been introduced for the classification and design of antimicrobial agents using computer-aided mol. design. For this propose, atom, atom-type, and total quadratic indexes have been generalized to codify chemical structure information. In this sense, stochastic quadratic indexes have been introduced for the description of the mol. structure. These stochastic fingerprints are based on a simple model for the intramol. movement of all valence-bond electrons. In this work, a complete data set containing 1006 antimicrobial agents is collected and presented.
Two structure-based antibacterial activity classification models have been generated. The models (including nonstochastic and stochastic indexes) classify correctly more than 90% of 1525 compds. in training sets. These models permit the correct classification of 92.28% and 89.31% of 505 compds. in an external test sets. The approach, also, satisfactorily compares with respect to nine of the most useful models for antimicrobial selection reported to date. Finally, a virtual screening of 87 new compds. reported in the anti-infective field with antibacterial activities is developed showing the ability of the models to identify new leads as antibacterial.

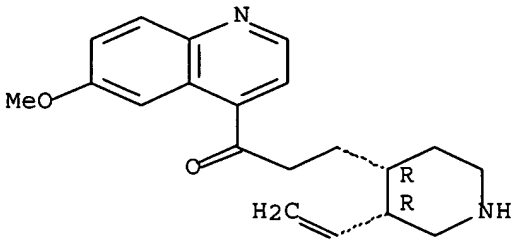
Controlled or Index Terms
84-55-9
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(atom, atom-type, and total nonstochastic and stochastic quadratic

fingerprints as promising approach for modeling antibacterial activity)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Publisher
Elsevier Ltd.

Reference Count
91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
141:71460 CA Full-text

Title
The crystalline monohydrate form of (3R,4R)-4-[(3S)-3-hydroxy-3-(6-methoxyquinolin-4- yl)propyl]-1-[2-[2-(thienyl)thio]ethyl]piperidine-3- carboxylic acid

Author/Inventor
Bourget, Jacques; Neves, Carole; Perrin, Marc Antoine; Janocha, Bernd; Billot, Pascal; Lafont, Sylvaine

Patent Assignee/Corporate Source
Aventis Pharma Sa, Fr.

Source
Fr. Demande, 16 pp. CODEN: FRXXBL

Document Type
Patent

Language
French

Family Accession Number Count
1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

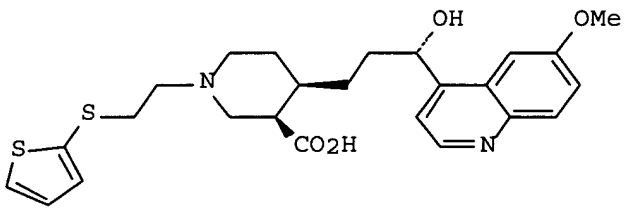
FR 2849034	A1	20040625	FR 2002-16418	20021220
US 2004147554	A1	20040729	US 2003-739704	20031218
US 6939970	B2	20050906		
WO 2004060886	A1	20040722	WO 2003-FR3810	20031219
AU 2003299359	A1	20040729	AU 2003-299359	20031219

Patent Number (1)
FR 2849034
Patent Publication Date (1)
20040625
Application Number (1)
FR 2002-16418
Application Date (1)
20021220
Patent Number (2)
US 2004147554
Patent Publication Date (2)
20040729
Application Number (2)
US 2003-739704
Application Date (2)
20031218
Patent Number (3)
US 6939970
Patent Publication Date (3)
20050906
Patent Number (4)
WO 2004060886
Patent Publication Date (4)
20040722
Application Number (4)
WO 2003-FR3810
Application Date (4)
20031219
Patent Number (5)
AU 2003299359
Patent Publication Date (5)
20040729
Application Number (5)
AU 2003-299359
Application Date (5)
20031219
Priority Application Information

FR 2002-16418	20021220
US 2003-479602P	20030618

WO 2003-FR3810	20031219

Priority Patent Number (1)
FR 2002-16418
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20021220
Priority Patent Number (2)
US 2003-479602P
Priority Kind Code (2)
P
Priority Patent Publication Date (2)
20030618
Priority Patent Number (3)
WO 2003-FR3810
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20031219
Graphics



I

Abstract
The invention is related to the preparation of the crystalline monohydrate form of (3R,4R)-4-[3-(S)-hydroxy-3-(6-methoxyquinolin-4-yl)propyl]-1-[2-(2- thienylthio)ethyl]piperidi ne-3-carboxylic acid I by recrystn. I•H2O is a highly pure, and stable powder at 25°, and may be used to provide pharmaceutical compns. containing I• H2O of high purity. Thus I•H2O, prepared by recrystn. of I or its polymorph (m.p. = 166°) from water/methanol was characterized by X-ray diffraction. X-ray diffraction data is provided for other I polymorphs. I are useful as antibacterial agents (no data).

Controlled or Index Terms

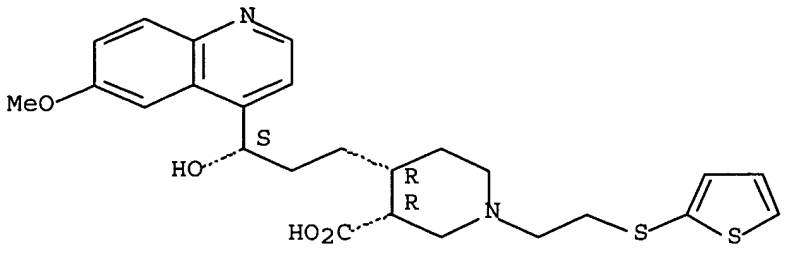
```
333781-77-4P, (3R,4R)-4-[(3S)-3-Hydroxy-3-(6-methoxyquinolin-4-
yl)propyl]-1-[2-[(2-thienyl)thio]ethyl]piperidine-3-carboxylic acid
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or
recovery); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (antibacterial agent; crystallization of (3R, 4R)-4-(3-(S)-hydroxy-3-
   (6-methoxyquinolin-4-yl) propyl)-1-[2-[2-(thienyl)thio]ethyl]piperidine-
   3-carboxylic acid monohydrate polymorph)
```

Hit Structure

```
CAS Registry Number
333781-77-4  CA


Chemical or Trade Name
3-Piperidinecarboxylic acid, 4-[(3S)-3-hydroxy-3-(6-methoxy-4-
quinolinyl)propyl]-1-[2-(2-thienylthio)ethyl]-, (3R,4R)- (9CI)  (CA INDEX
```

NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

141:71459 CA Full-text

Title

The crystalline form of (3R,4R)-4-[(3S)-3-hydroxy-3-(6- methoxyquinolin-4-yl)propyl]-1-[2-[2- (thienyl)thio] ethyl]piperidine-3-carboxylic acid

Author/Inventor

Bourget, Jacques; Neves, Carole; Perrin, Marc Antoine; Mignani, Serge; Tabart, Michel; Cheve, Michel; Janocha, Bernd; Billot, Pascal; Lafont, Sylvaine

Patent Assignee/Corporate Source

Aventis Pharma Sa, Fr.

Source

Fr. Demande, 16 pp. CODEN: FRXXBL

Document Type

Patent

Language

French

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2849033	A1	20040625	FR 2002-16415	20021220
US 2004147751	A1	20040729	US 2003-739700	20031218
US 6982334	B2	20060103		
WO 2004058748	A1	20040715	WO 2003-FR3811	20031219
AU 2003303462	A1	20040722	AU 2003-303462	20031219

Patent Number (1)

FR 2849033

Patent Publication Date (1)

20040625

Application Number (1)

FR 2002-16415

Application Date (1)

20021220

Patent Number (2)

US 2004147751

Patent Publication Date (2)

20040729

Application Number (2)

US 2003-739700

Application Date (2)

20031218

Patent Number (3)

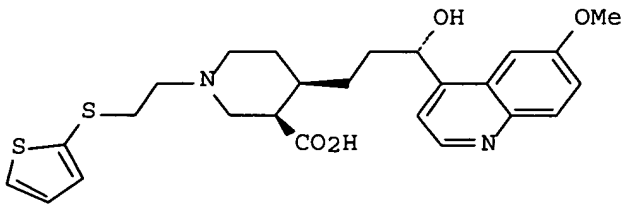
US 6982334

Patent Publication Date (3)

20060103
Patent Number (4)
WO 2004058748
Patent Publication Date (4)
20040715
Application Number (4)
WO 2003-FR3811
Application Date (4)
20031219
Patent Number (5)
AU 2003303462
Patent Publication Date (5)
20040722
Application Number (5)
AU 2003-303462
Application Date (5)
20031219
Priority Application Information

FR 2002-16415	20021220
US 2003-480412P	20030620
WO 2003-FR3811	20031219

Priority Patent Number (1)
FR 2002-16415
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20021220
Priority Patent Number (2)
US 2003-480412P
Priority Kind Code (2)
P
Priority Patent Publication Date (2)
20030620
Priority Patent Number (3)
WO 2003-FR3811
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20031219
Graphics



I

Abstract

The invention is related to the preparation of a white to pale yellow crystalline form of (3R,4R)-4-[3-(S)-hydroxy-3-(6-methoxyquinolin-4-yl)propyl]-1-[2-(2- thienylthio)ethyl]piperidi ne-3-carboxylic acid (I, m.p. = 166 °C) by recrystn. I is a highly pure, anhydrous, and stable powder at higher temperature,and may be used to provide pharmaceutical compns. containing I of high purity. Thus I, prepared by recrystn. from acetonitrile, or by dehydration of a crystalline form, was characterized by X-ray diffraction. X-ray diffraction data is provided for other I polymorphs. I are useful as antibacterial agents (no data).

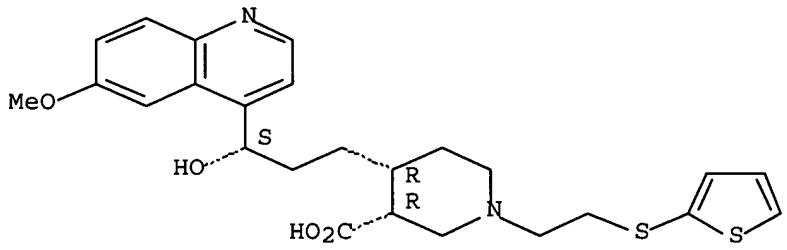
Controlled or Index Terms

333781-77-4P, (3R,4R)-4-[(3S)-3-Hydroxy-3-(6-methoxyquinolin-4-yl)propyl]-1-[2-[(2-thienyl)thio]ethyl]piperidine-3-carboxylic acid
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibacterial agent; crystallization of (3R, 4R)-4-(3-(S)-hydroxy-3-(6-methoxyquinolin-4-yl) propyl)-1-[2-[2-(thienyl)thio]ethyl]piperidine-3-carboxylic acid polymorph)

Hit Structure

CAS Registry Number
333781-77-4 CA

Chemical or Trade Name
3-Piperidinecarboxylic acid, 4-[(3S)-3-hydroxy-3-(6-methoxy-4-quinolinyl)propyl]-1-[2-(2-thienylthio)ethyl]-, (3R,4R)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

140:375178 CA Full-text

Title

Preparation of quinolines, quinazolines, and naphthyridines as antibacterials.

Author/Inventor

Surivet, Jean-Philippe; Zumbrunn, Cornelia; Hubschwerlen, Christian; Perez Frutos Hoener, Annabelle

Patent Assignee/Corporate Source

Morphochem Aktiengesellschaft Fuer Kombinatorische Chemie, Germany

Source

PCT Int. Appl., 97 pp. CODEN: PIXXD2

Document Type

Patent

Language

German

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035569	A2	20040429	WO 2003-EP11203	20031009
WO 2004035569	A3	20040902		
DE 10247233	A1	20040617	DE 2002-10247233	20021010
DE 10256405	A1	20040617	DE 2002-10256405	20021202
CA 2500320	AA	20040429	CA 2003-2500320	20031009
AU 2003301414	A1	20040504	AU 2003-301414	20031009
EP 1551829	A2	20050713	EP 2003-808720	20031009
BR 2003015221	A	20050823	BR 2003-15221	20031009
CN 1703412	A	20051130	CN 2003-80101243	20031009
JP 2006505622	T2	20060216	JP 2005-501280	20031009
US 2006040949	A1	20060223	US 2005-529986	20050331

Patent Number (1)

WO 2004035569

Patent Publication Date (1)

20040429

Application Number (1)

WO 2003-EP11203

Application Date (1)

20031009

Patent Number (2)

WO 2004035569

Patent Publication Date (2)

20040902

Patent Number (3)

DE 10247233

Patent Publication Date (3)

20040617

Application Number (3)

DE 2002-10247233

Application Date (3)

20021010

Patent Number (4)

DE 10256405
Patent Publication Date (4)
20040617
Application Number (4)
DE 2002-10256405
Application Date (4)
20021202
Patent Number (5)
CA 2500320
Patent Publication Date (5)
20040429
Application Number (5)
CA 2003-2500320
Application Date (5)
20031009
Patent Number (6)
AU 2003301414
Patent Publication Date (6)
20040504
Application Number (6)
AU 2003-301414
Application Date (6)
20031009
Patent Number (7)
EP 1551829
Patent Publication Date (7)
20050713
Application Number (7)
EP 2003-808720
Application Date (7)
20031009
Patent Number (8)
BR 2003015221
Patent Publication Date (8)
20050823
Application Number (8)
BR 2003-15221
Application Date (8)
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CN 1703412
Patent Publication Date (9)
20051130
Application Number (9)
CN 2003-80101243
Application Date (9)
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JP 2006505622
Patent Publication Date (10)
20060216
Application Number (10)

JP 2005-501280
Application Date (10)
20031009
Patent Number (11)
US 2006040949
Patent Publication Date (11)
20060223
Application Number (11)
US 2005-529986
Application Date (11)
20050331
Priority Application Information

DE 2002-10247233	20021010
DE 2002-10256405	20021202
WO 2003-EP11203	20031009

Priority Patent Number (1)
DE 2002-10247233
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20021010
Priority Patent Number (2)
DE 2002-10256405
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
20021202
Priority Patent Number (3)
WO 2003-EP11203
Priority Kind Code (3)
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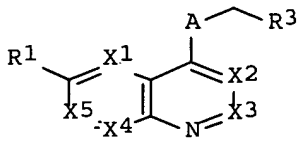
Priority Patent Publication Date (3)
20031009
Other Source
MARPAT 140:375178
Graphics



I

Abstract
Title compds. [I; A = O, S, N, alkylene, alkenylene, alkynylene, heteroalkylene; X1-X5 = N, CR2; R1 = H, halo, OH, alkoxy, heteroalkoxy; R2 = H, halo, OH, alkyl, alkenyl, alkynyl, heteroalkyl; R3 = (substituted) piperidinyl, piperazinyl, morpholinyl, etc.], were prepared Thus, (3S)-2-(3-aminomethylpiperidin-1-yl)-1-(6-methoxyquinolin-4-yl)ethanol (preparation given), 3-oxo-3,4-dihydro-2H-benzo[1,4]-oxazine-6-carboxaldehyde, and 3Å mol. sieves were stirred 16 h in CH2Cl2/MeOH; NaBH4 was added followed by

stirring for 2 h to give (3S)-6-[[[1-[(2RS)-hydroxy-2-(6- methoxyquinolin-4-yl)ethyl]piperidin-3-ylmethyl]amino] methyl]-4H- benzo[1,4]oxazin-3-one. This showed a min. inhibitory concentration of ≤0.125 μg/mL against ≥ 1 member of a panel of bacteria.

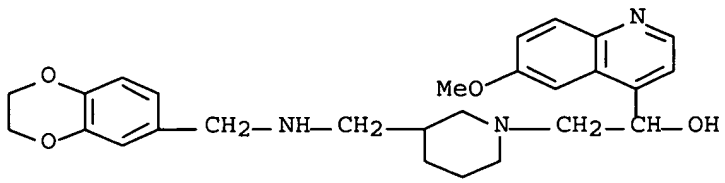
Controlled or Index Terms

683268-83-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinolines, quinazolines, and naphthyridines as antibacterials)

Hit Structure

CAS Registry Number
683268-83-9 CA

Chemical or Trade Name
4-Quinolinemethanol, α-[[3-[[[(2,3-dihydro-1,4-benzodioxin-6-yl)methyl]amino]methyl]-1-piperidinyl]methyl]-6-methoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
140:235614 CA Full-text

Title
Quinolyl propyl piperidine derivatives, the preparation thereof and compositions containing same, useful as antimicrobials

Author/Inventor
Bacque, Eric; Bigot, Antony; El Ahmad, Youssef; Malleron, Jean Luc; Mignani, Serge; Ronan, Baptiste; Tabart, Michel; Viviani, Fabrice

Patent Assignee/Corporate Source
Aventis Pharma SA, Fr.

Source
Fr. Demande, 66 pp. CODEN: FRXXBL

Document Type
Patent

Language
French

Family Accession Number Count
1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

FR 2844270	A1	20040312	FR 2002-11212	20020911
FR 2844270	B1	20060519		
CA 2503732	AA	20040325	CA 2003-2503732	20030910
WO 2004024712	A1	20040325	WO 2003-FR2686	20030910
AU 2003278296	A1	20040430	AU 2003-278296	20030910
US 2004087619	A1	20040506	US 2003-659164	20030910
EP 1542988	A1	20050622	EP 2003-769605	20030910
EP 1542988	B1	20060412		
AT 323080	E	20060415	AT 2003-769605	20030910

Patent Number (1)
FR 2844270
Patent Publication Date (1)
20040312
Application Number (1)
FR 2002-11212
Application Date (1)
20020911
Patent Number (2)
FR 2844270
Patent Publication Date (2)
20060519
Patent Number (3)
CA 2503732
Patent Publication Date (3)
20040325
Application Number (3)
CA 2003-2503732
Application Date (3)
20030910
Patent Number (4)
WO 2004024712
Patent Publication Date (4)
20040325
Application Number (4)
WO 2003-FR2686
Application Date (4)
20030910
Patent Number (5)
AU 2003278296
Patent Publication Date (5)
20040430
Application Number (5)
AU 2003-278296

Application Date (5)
20030910
Patent Number (6)
US 2004087619
Patent Publication Date (6)
20040506
Application Number (6)
US 2003-659164
Application Date (6)
20030910
Patent Number (7)
EP 1542988
Patent Publication Date (7)
20050622
Application Number (7)
EP 2003-769605
Application Date (7)
20030910
Patent Number (8)
EP 1542988
Patent Publication Date (8)
20060412
Patent Number (9)
AT 323080
Patent Publication Date (9)
20060415
Application Number (9)
AT 2003-769605
Application Date (9)
20030910
Priority Application Information

FR 2002-11212	20020911
WO 2003-FR2686	20030910

Priority Patent Number (1)
FR 2002-11212
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20020911
Priority Patent Number (2)
WO 2003-FR2686
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20030910
Other Source
MARPAT 140:235614
Graphics
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Abstract

New 4-[3-(Quinol-4-yl)propyl]piperidine derivs. I are disclosed [wherein R1 = H or F; R2 = COOH, CH2CO2H, CH2OH; R3 = C1-6 alkyl substituted by: (un)substituted SPh [which can include 1-4 substituents chosen from halo, OH, alkyl, alkoxy, CF3, CF3O, CO2H, alkyloxycarbonyl, cyano, or NH2], by 3- to 7-membered cycloalkylthio, or by 5- to 6-membered aromatic heterocyclylthio comprising 1-4 N/O/S atoms and optionally substituted by halo, OH, alkyl, alkoxy, CF3, CF3O, oxo, COOH, alkyloxycarbonyl, cyano, or NH2; or R3 = propargyl substituted by: Ph [which can include 1-4 substituents chosen from halo, OH, alkyl, alkoxy, CF3, CF3O, CO2H, alkyloxycarbonyl, cyano, or NH2], by cycloalkyl containing 3 -7 members, or by 5- to 6-membered aromatic heterocyclyl with 1-4 N/O/S atoms [and (un)substituted by halo, OH, alkyl, alkoxy, CF3, CF3O, oxo, COOH, alkyloxycarbonyl, cyano, or NH2]; R4 = C1-6 alkyl, alkenyl-CH2, or alkynyl-CH2 (alkenyls or alkynyls comprise 2-6 C atoms), cycloalkyl, or cycloalkylalkyl (cycloalkyls comprises 3-8 C atoms); including enantiomeric and diastereoisomeric forms, mixts. thereof, and salts thereof]. The novel derivs. are particularly interesting as antimicrobial agents. Five synthetic examples are given. For example, II was prepared by N-alkylation of III (preparation given) with 2-[(2-bromoethyl)sulfanyl]-1,4- difluorobenzene, followed by acidic hydrolysis. Compds. I were active against exptl. infections of mice by Staphylococcus aureus IP 8203 at 12-150 mg/kg s.c., and at 26-150 mg/kg orally. None of the compds. showed toxicity in mice at 100 mg/kg s.c. (2 administrations).

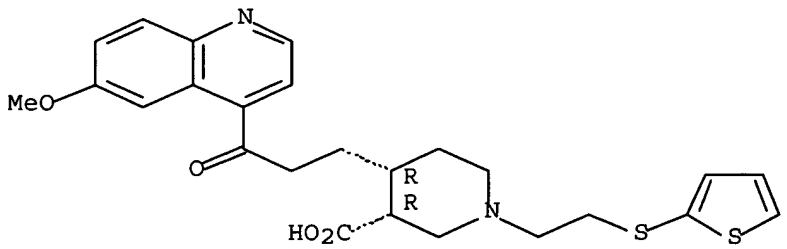
Controlled or Index Terms

668463-34-1P, (3R,4R)-4-[3-Oxo-3-(6-methoxyquinolin-4-yl)propyl]-1-[2-[(2-thienyl)sulfanyl]ethyl]piperidine-3-carboxylic acid
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bactericide; preparation of quinolylpropylpiperidines as antimicrobials)

Hit Structure

CAS Registry Number
668463-34-1 CA

Chemical or Trade Name
3-Piperidinecarboxylic acid, 4-[3-(6-methoxy-4-quinolinyl)-3-oxopropyl]-1-[2-(2-thienylthio)ethyl]-, (3R,4R)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

140:146015 CA Full-text

Title

Preparation of quinolylpropylpiperidines as antimicrobial agents

Author/Inventor

Bacque, Eric; Malleron, Jean Luc; Mignani, Serge; Tabart, Michel

Patent Assignee/Corporate Source

Aventis Pharma SA, Fr.

Source

Fr. Demande, 39 pp. CODEN: FRXXBL

Document Type

Patent

Language

French

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2842807	A1	20040130	FR 2002-9334	20020723
US 2004058919	A1	20040325	US 2003-622655	20030718
US 6806277	B2	20041019		
WO 2004011454	A2	20040205	WO 2003-FR2306	20030722
WO 2004011454	A3	20040408		
AU 2003267528	A1	20040216	AU 2003-267528	20030722

Patent Number (1)

FR 2842807

Patent Publication Date (1)

20040130

Application Number (1)

FR 2002-9334

Application Date (1)

20020723

Patent Number (2)

US 2004058919

Patent Publication Date (2)

20040325

Application Number (2)

US 2003-622655

Application Date (2)

20030718

Patent Number (3)

US 6806277

Patent Publication Date (3)

20041019

Patent Number (4)

WO 2004011454

Patent Publication Date (4)

20040205

Application Number (4)
WO 2003-FR2306
Application Date (4)
20030722
Patent Number (5)
WO 2004011454
Patent Publication Date (5)
20040408
Patent Number (6)
AU 2003267528
Patent Publication Date (6)
20040216
Application Number (6)
AU 2003-267528
Application Date (6)
20030722
Priority Application Information

FR 2002-9334	20020723
WO 2003-FR2306	20030722

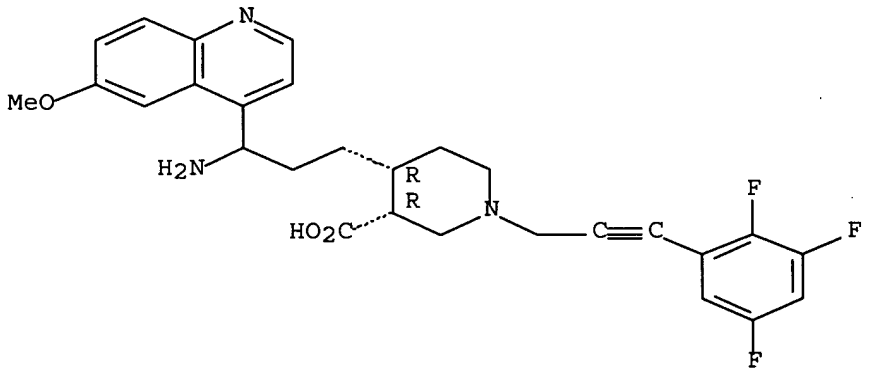
Priority Patent Number (1)
FR 2002-9334
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20020723
Priority Patent Number (2)
WO 2003-FR2306
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20030722
Other Source
MARPAT 140:146015
Graphics
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Abstract
Title compds. I [wherein R1 = alkyl/dialkyl/hydroxy/alkyloxy/ alkyl alkyloxy/amino; R2 = carboxy, carboxymethyl, hydroxymethyl; R3 = (un)substituted alkyl, propargyl; R4 = alkyl, alkenyl-CH2 -, alkynyl-CH2-, cycloalkyl, cycloalkylalkyl; diastereoisomeric forms, mixts. thereof, cis or trans forms, and their salts] were prepared as antimicrobial agents. Two synthetic examples are given. For example, II was prepd in 7 steps from olefin III by oxidation with NaMnO4 to the acid concomitant with N-BOC-protection, esterification, followed by BOC deprotection, N-alkylation with propargylic alc., reaction of the resulting alkyne with 1-bromo-2,3,5-trifluorobenzene, oximation, reduction of the oxime, and hydrolysis of the ester. I were active against exptl. infections of mice by Staphylococcus aureus IP8203 at 65 mg/kg s.c., and at 70 mg/kg orally. None of the compds. showed acute toxicity in mice at 100 mg/kg s.c. (2 administrations).
Controlled or Index Terms
651320-88-6P, (3R,4R)-1-[3-(2,3,5-Trifluorophenyl)prop-2-ynyl]-4-[3-(R,S)-amino-3-(6-methoxyquinolin-4-yl)propyl]piperidine-3-carboxylic acid
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)
(antimicrobial agent; preparation of quinolylpropylpiperidines as antimicrobial agents)

Hit Structure

CAS Registry Number
651320-88-6 CA

Chemical or Trade Name
3-Piperidinecarboxylic acid, 4-[3-amino-3-(6-methoxy-4-quinolinyl)propyl]-1-[3-(2,3,5-trifluorophenyl)-2-propynyl]-, (3R,4R)-rel- (9CI) (CA INDEX NAME)



Stereochemistry
Relative stereochemistry.

Reference Count
3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

139:337959 CA Full-text

Title

Preparation of nitrogen-containing bicyclic heterocycles for use as antibacterials

Author/Inventor

Brooks, Gerald; Davies, David Thomas; Jones, Graham Elgin; Markwell, Roger Edward; Pearson, Neil David

Patent Assignee/Corporate Source

Smithkline Beecham P.L.C., UK

Source

PCT Int. Appl., 163 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087098	A1	20031023	WO 2002-EP5708	20020524
TW 232219	B1	20050511	TW 2002-91110839	20020523
CA 2448525	AA	20031023	CA 2002-2448525	20020524
AU 2002367697	A1	20031027	AU 2002-367697	20020524
EP 1399443	A1	20040324	EP 2002-807202	20020524
BR 2002010016	A	20040615	BR 2002-10016	20020524
CN 1535272	A	20041006	CN 2002-814668	20020524
JP 2005519981	T2	20050707	JP 2003-584054	20020524
ZA 2003008696	A	20040521	ZA 2003-8696	20031107
US 2004171620	A1	20040902	US 2004-478154	20040406

Patent Number (1)

WO 2003087098

Patent Publication Date (1)

20031023

Application Number (1)

WO 2002-EP5708

Application Date (1)

20020524

Patent Number (2)

TW 232219

Patent Publication Date (2)

20050511
Application Number (2)
TW 2002-91110839
Application Date (2)
20020523
Patent Number (3)
CA 2448525
Patent Publication Date (3)
20031023
Application Number (3)
CA 2002-2448525
Application Date (3)
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AU 2002367697
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20031027
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Application Number (6)
BR 2002-10016
Application Date (6)
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CN 1535272
Patent Publication Date (7)
20041006
Application Number (7)
CN 2002-814668
Application Date (7)
20020524
Patent Number (8)
JP 2005519981
Patent Publication Date (8)
20050707
Application Number (8)
JP 2003-584054
Application Date (8)

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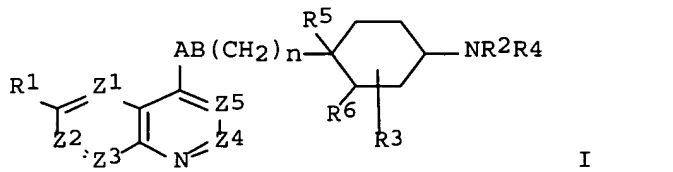
ZA 2003008696
Patent Publication Date (9)
20040521
Application Number (9)
ZA 2003-8696
Application Date (9)
20031107
Patent Number (10)
US 2004171620
Patent Publication Date (10)
20040902
Application Number (10)
US 2004-478154
Application Date (10)
20040406
Priority Application Information

GB 2001-12834	20010525
WO 2002-EP5708	20020524

Priority Patent Number (1)
GB 2001-12834
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20010525
Priority Patent Number (2)
WO 2002-EP5708
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20020524
Other Source
MARPAT 139:337959
Graphics



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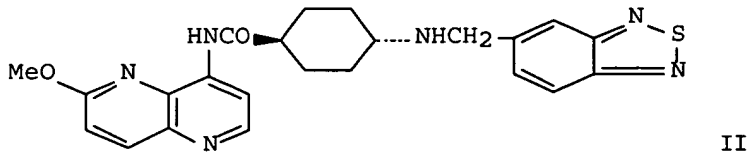


II

Abstract

Naphthyridines I [one of Z1-Z5 = N, one = (un)substituted Ch, the others = CH; one of Z1-Z5 = (un) substituted Ch, the others = CH; R1 = H, OH, halogen, (un)substituted alkoxy, alkyl, alkylthio, CF3, NO2, N3, acyl, acyloxy, acylthio, alkylsulfonyl, alkylsulfinyl, arylsulfonyl, arylsulfinyl, amino; R2 = H, (un)substituted alkyl, alkenyl; R3 = H, CO2H, alkoxycarbonyl, (un)substituted alkyl, CONH2, CN, tetrazolyl, 2-oxooxazolidinyl, 3-hydroxy-3-cyclobutene-1,2-dion-4-yl,2,4- thiazolidinedion-5-yl, 1,2,4-triazol-5-yl, 5-oxo-1,2, 4-oxadiazol-3-yl; R4 = (un)substituted alkyl, heterocyclic; R5, R6 = H; R5R6 = bond; AB = (un)substituted CONH, NHCO, COCH2, CH2CO, OCH2, CH2O, NHCH2, CH2NH, NHSO2, CH2SO2, CH2CH2; n = 0, 1] were prepared for use as bactericides. Thus, 2,1,3-benzothiadiazole-5-carboxylic acid was reduced to the alc., mesylated, and treated with the amine fragment, prepared from 5-amino-2-methoxypyridine in 5 steps, to give the naphthyridine II, which had IC50 against Staphylococcus aureus Oxford, several S. pneumoniae strains, and Escherichia coli strains of ≤ 4 μg/mL.

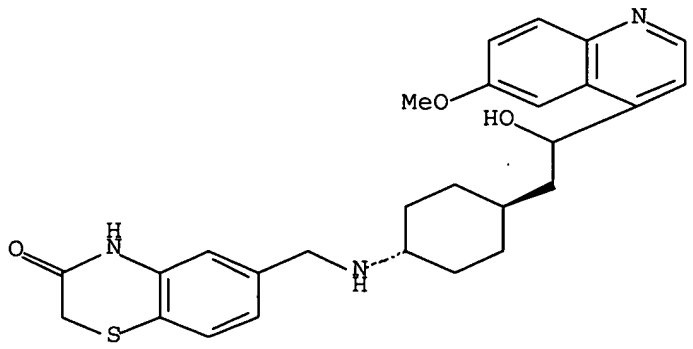
Controlled or Index Terms

615565-93-0P
RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of nitrogen-containing bicyclic heterocycles for use as antibacterials)

Hit Structure

CAS Registry Number
615565-93-0 CA

Chemical or Trade Name
2H-1,4-Benzothiazin-3(4H)-one, 6-[[[trans-4-[2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]cyclohexyl]amino]methyl]- (9CI) (CA INDEX NAME)



Stereochemistry

Relative stereochemistry.

Reference Count

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

139:230949 CA Full-text

Title

Preparation of disaccharide-containing 15-membered cyclic azalides and 16-membered cyclic diazalides as antibacterial agents

Author/Inventor

Miura, Tomoaki; Kurihara, Kenichi; Yoshida, Takuji; Ajito, Keiichi

Patent Assignee/Corporate Source

Meiji Seika Kaisha, Ltd., Japan

Source

PCT Int. Appl., 115 pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072589	A1	20030904	WO 2003-JP2035	20030225
AU 2003211668	A1	20030909	AU 2003-211668	20030225
EP 1479687	A1	20041124	EP 2003-707046	20030225
CN 1639181	A	20050713	CN 2003-804655	20030225
US 2005209446	A1	20050922	US 2005-504327	20050418

Patent Number (1)

WO 2003072589

Patent Publication Date (1)

20030904

Application Number (1)

WO 2003-JP2035

Application Date (1)

20030225

Patent Number (2)

AU 2003211668

Patent Publication Date (2)

20030909

Application Number (2)

AU 2003-211668

Application Date (2)

20030225

Patent Number (3)

EP 1479687

Patent Publication Date (3)

20041124

Application Number (3)

EP 2003-707046

Application Date (3)

20030225

Patent Number (4)

CN 1639181

Patent Publication Date (4)

20050713
Application Number (4)
CN 2003-804655
Application Date (4)
20030225
Patent Number (5)
US 2005209446
Patent Publication Date (5)
20050922
Application Number (5)
US 2005-504327
Application Date (5)
20050418
Priority Application Information

JP 2002-49825	20020226
WO 2003-JP2035	20030225

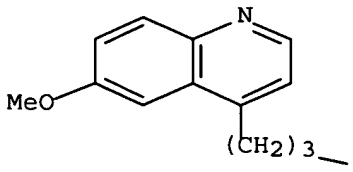
Priority Patent Number (1)
JP 2002-49825
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20020226
Priority Patent Number (2)
WO 2003-JP2035
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20030225
Other Source
MARPAT 139:230949
Graphics
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Abstract
The title compds. I-III [wherein R1 = H or alkylcarbonyl; R2 = H, O, OH, or alkylcarbonyloxy, etc.; R3 = H, (un)substituted alkyl(carbonyl), alkenyl(carbonyl), alkynyl, amino, etc.; R4 = H or an (un)substituted saccharide group; R8 and R9 = independently H or alkylcarbonyl; R10 and R11 = independently H, (un) substituted alkyl, alkenyl, alkynyl, etc.; Z = a single bond, phenylene, or CH2-C6H4-CH2; R12 = H, alkylcarbonyl, EtOCH2CH2, silyl, or (un)substituted PhCH2OCO; R13 = (un)substituted CH2; X = CHO, HOCH2, halomethyl, or (un)substituted HSO3CH2, etc.] and pharmaceutically acceptable salts thereof are prepared as antibacterial agents. The compound IV was prepared in a multi-step synthesis. IV showed MIC of 0.03 μg/mL against micrococcus luteus ATCC9341 in horse.
Controlled or Index Terms
594873-28-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of disaccharide-containing macrocyclic azalides and
diazalides as antibacterial agents)
Hit Structure

CAS Registry Number

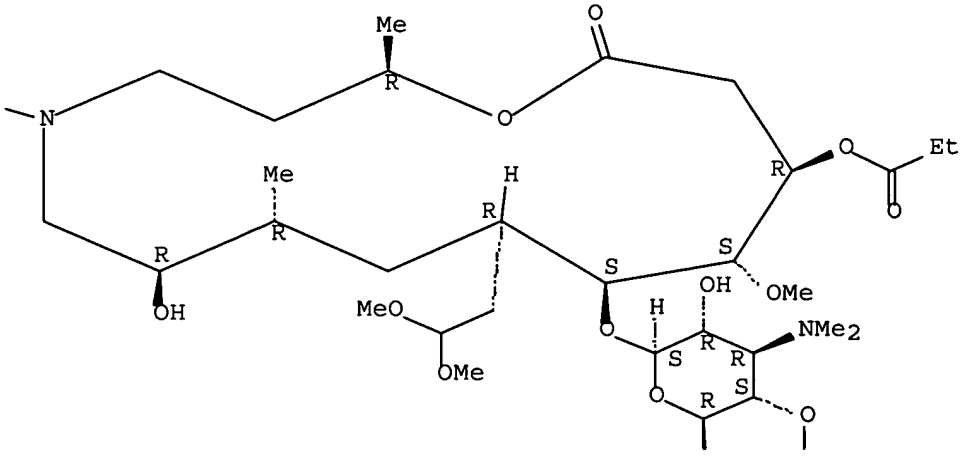
594873-28-6 CA

Chemical or Trade Name
1-Oxa-5-azacyclopentadecan-15-one, 11-[[4-O-[3-O-acetyl-2,6-dideoxy-3-C-methyl-4-O-(1-oxopropyl)-α-L-ribo-hexopyranosyl]-3,6-dideoxy-3-(dimethylamino)-β-D-glucopyranosyl]oxy]-10-(2,2-dimethoxyethyl)-7-hydroxy-12-methoxy-5-[3-(6-methoxy-4-quinolinyl)propyl]-2,8-dimethyl-13-(1-oxopropoxy)-, (2R,7R,8R,10R,11S,12S,13R)- (9CI) (CA INDEX NAME)

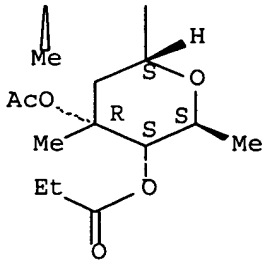
PAGE 1-A



PAGE 1-B



PAGE 2-B



Stereochemistry
Absolute stereochemistry.Rotation (-).
Reference Count
19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 25 CA COPYRIGHT 2006 ACS on STN
Accession Number
139:164798 CA Full-text
Title
Preparation of aminopiperidine derivatives for treatment of bacterial infections
Author/Inventor
Miller, William Henry; Pearson, Neil David; Pendrak, Israil; Seefeld, Mark Andrew
Patent Assignee/Corporate Source
Glaxo Group Limited, UK; Daines, Robert A
Source
PCT Int. Appl., 96 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064421	A1	20030807	WO 2003-EP823	20030127
EP 1470125	A1	20041027	EP 2003-734701	20030127
US 2005159411	A1	20050721	US 2003-502233	20030127
JP 2005525324	T2	20050825	JP 2003-564044	20030127

Patent Number (1)
WO 2003064421
Patent Publication Date (1)
20030807
Application Number (1)
WO 2003-EP823
Application Date (1)
20030127
Patent Number (2)
EP 1470125
Patent Publication Date (2)
20041027
Application Number (2)
EP 2003-734701
Application Date (2)
20030127
Patent Number (3)

US 2005159411
Patent Publication Date (3)
20050721
Application Number (3)
US 2003-502233
Application Date (3)
20030127
Patent Number (4)
JP 2005525324
Patent Publication Date (4)
20050825
Application Number (4)
JP 2003-564044
Application Date (4)
20030127
Priority Application Information

GB 2002-2026	20020129
GB 2002-29824	20021220
WO 2003-EP823	20030127

Priority Patent Number (1)
GB 2002-2026
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20020129
Priority Patent Number (2)
GB 2002-29824
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
20021220
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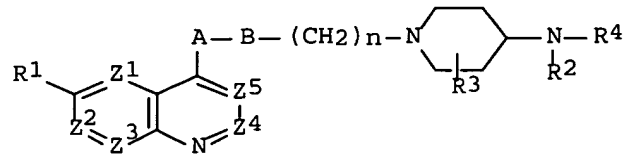
WO 2003-EP823
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20030127
Other Source
MARPAT 139:164798
Graphics



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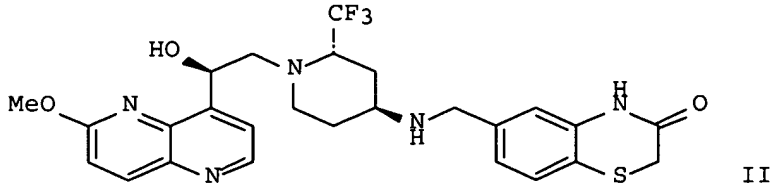


II

Abstract

Title compds. I [one of Z1-5 = N, one = CR1a and the remainder = CH or one of Z1-5 = CR1a and the remainder = CH; R1-1a = H, OH, alkoxy, amino, etc.; R2 = H, alkyl, alkenyl; R3 = CF3, 2-oxo, etc.; R4 = UR5; U = CO, SO2, CH2; R5 = bicyclic, heterocyclic ring system A; n = 0-1; AB = amido, alkylacyl, aminosulfonyl, etc.] are prepared For instance, bromomethyl (6-methoxy[1,5]naphthyridin-4-yl)ketone (preparation given) is reduced (PhMe, (+)-DIPCl) to give the (R)-alc., converted to the oxirane (MeOH, K2CO3) and used to alkylate [(2S,4S)-2-(trifluoromethyl)piperidin-4-yl]carbamic acid tert-Bu ester (preparation given) and deprotected to give (1R)-2-[(2S,4S)-4-amino-2-(trifluoromethyl)piperidin-1-yl]-1-(6-methoxy[1,5]naphthyridin-4-yl)ethanol. This amine is alkylated with 3-oxo-3,4-dihydro-2H-benzo[1,4] thiazine-6-carboxaldehyde (preparation given) (EtOH, NaBH4) to give II. Selected examples have MICs ≤ 2 μg/mL vs., e.g., S. epidermidis CL7, S. aureus WCUH29, etc.

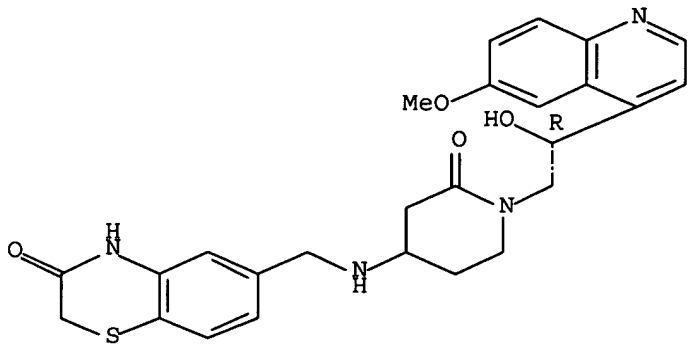
Controlled or Index Terms

577691-51-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminopiperidine derivs. for treatment of bacterial infections)

Hit Structure

CAS Registry Number
577691-51-1 CA

Chemical or Trade Name
2H-1,4-Benzothiazin-3(4H)-one, 6-[[[1-[(2R)-2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]-2-oxo-4-piperidinyl]amino]methyl]- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.
Reference Count
4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 25 CA COPYRIGHT 2006 ACS on STN
Accession Number
139:164795 CA Full-text
Title
Preparation of aminopiperidine compounds as antibacterial agents
Author/Inventor
Miller, William Henry; Pearson, Neil David; Pendrak, Israil; Seefeld, Mark Andrew
Patent Assignee/Corporate Source
Glaxo Group Limited, UK; Daines, Robert A
Source
PCT Int. Appl., 47 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064431	A2	20030807	WO 2003-EP824	20030127
WO 2003064431	A3	20031218		
EP 1470131	A2	20041027	EP 2003-734702	20030127
US 2005085494	A1	20050421	US 2003-502234	20030127
JP 2005519922	T2	20050707	JP 2003-564054	20030127

Patent Number (1)
WO 2003064431

Patent Publication Date (1)
20030807
Application Number (1)
WO 2003-EP824
Application Date (1)
20030127
Patent Number (2)
WO 2003064431
Patent Publication Date (2)
20031218
Patent Number (3)
EP 1470131
Patent Publication Date (3)
20041027
Application Number (3)
EP 2003-734702
Application Date (3)
20030127
Patent Number (4)
US 2005085494
Patent Publication Date (4)
20050421
Application Number (4)
US 2003-502234
Application Date (4)
20030127
Patent Number (5)
JP 2005519922
Patent Publication Date (5)
20050707
Application Number (5)
JP 2003-564054
Application Date (5)
20030127
Priority Application Information

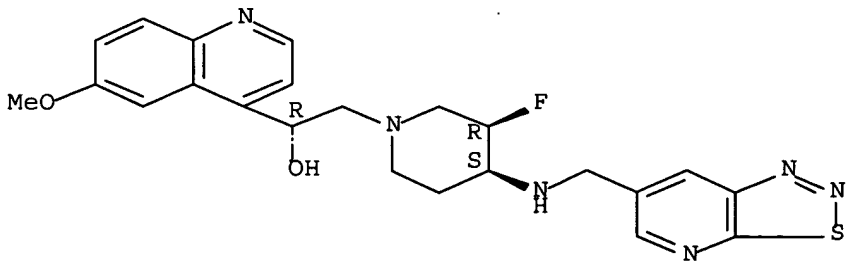
GB 2002-2025	20020129
GB 2002-29819	20021220
WO 2003-EP824	20030127

Priority Patent Number (1)
GB 2002-2025
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20020129
Priority Patent Number (2)
GB 2002-29819
Priority Kind Code (2)
A
Priority Patent Publication Date (2)

20021220
Priority Patent Number (3)
WO 2003-EP824
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20030127
Other Source
MARPAT 139:164795
Graphics
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Abstract
The title compds. [I; one of Z1-Z5 = N, one = CR1a and the remainder = CH; or one or two of Z1-Z5 = CR1a and the remainder are CH; R1, R1a = H, OH, alkoxy, etc.; or when Z5 = CR1a, then R1a may instead be CN, CH2OH, CO2H; or R1 and R1a on adjacent positions may together form ethylenedioxy; provided that when Z1-Z5 = CR1a or CH, then R1 is not H; R2 = H, alkyl, alkenyl, etc.; R3 is in the 2-, 3- or 4- position and is CF3 or is in the 2-position and is oxo; or R3 is in the 3-position and = F, (un)substituted NH2; R4 = UR5 (wherein U = CO, SO2, CH2; R5 = (un)substituted bicyclic carbocyclic or heterocyclic ring system); n = 0-1; A = O, (un)substituted NH, CH2; B = O, SO2, (un)substituted NH, CH2], useful in the treatment of bacterial infections in mammals (biol. data given), particularly in man, were prepared E.g., a multi-step synthesis of II and III as a 1:1 mixture of isomers (starting from Me 6-chloro-5-nitronicotinate), was given. A pharmaceutical composition comprising the title compound I was claimed.
Controlled or Index Terms
577771-02-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminopiperidine compds. as antibacterial agents)
Hit Structure

CAS Registry Number
577771-02-9 CA

Chemical or Trade Name
4-Quinolinemethanol, α-[[(3R,4S)-3-fluoro-4-[([1,2,3]thiadiazolo[5,4-b]pyridin-6-ylmethyl)amino]-1-piperidinyl]methyl]-6-methoxy-, (αR)-(9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L9 ANSWER 13 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

138:170062 CA Full-text

Title

New 6-ethoxyquinolines as simple optoquine analogs

Author/Inventor

Jones, Raymond C. F.; Collighan, Russell J.; Crane, Joanna; Hodges, Nikolas J.; Ling, Matthew S.; Stroud, Joanne

Patent Assignee/Corporate Source

Department of Chemistry, Nottingham University, Nottingham, NG7 2RD, UK

Source

Synthetic Communications (2002), 32(20), 3185-3191 CODEN: SYNCAV; ISSN: 0039-7911

Document Type

Journal

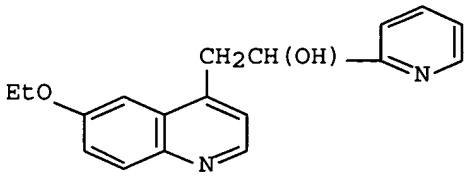
Language

English

Other Source

CASREACT 138:170062

Graphics



I

Abstract

Reaction of 6-ethoxylepidine (6-ethoxy-4-methylquinoline) with strong base and electrophiles leads to new derivs., e.g., I, as possible optoquine analogs.

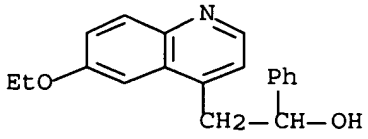
Controlled or Index Terms

497140-89-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and reactions of 6-ethoxy-4-methylquinoline)

Hit Structure

CAS Registry Number
497140-89-3 CA

Chemical or Trade Name
4-Quinolineethanol, 6-ethoxy-α-phenyl- (9CI) (CA INDEX NAME)



Publisher

Marcel Dekker, Inc.

Reference Count

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 14 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

137:125092 CA Full-text

Title

Preparation of 4-piperidinylquinolines and nitrogenated analogs as antibacterial agents

Author/Inventor

Davies, David Thomas; Jones, Graham Elgin; Markwell, Roger Edward; Miller, William; Pearson, Neil David

Patent Assignee/Corporate Source

Smithkline Beecham P.L.C., UK

Source

PCT Int. Appl., 94 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002056882	A1	20020725	WO 2002-EP587	20020122
EP 1359908	A1	20031112	EP 2002-702296	20020122
JP 2004520360	T2	20040708	JP 2002-557390	20020122
US 2004138219	A1	20040715	US 2004-466394	20040126

Patent Number (1)

WO 2002056882

Patent Publication Date (1)

20020725

Application Number (1)

WO 2002-EP587

Application Date (1)

20020122

Patent Number (2)

EP 1359908

Patent Publication Date (2)

20031112

Application Number (2)

EP 2002-702296

Application Date (2)

20020122

Patent Number (3)

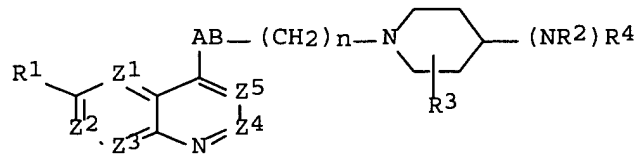
JP 2004520360

Patent Publication Date (3)

20040708
Application Number (3)
JP 2002-557390
Application Date (3)
20020122
Patent Number (4)
US 2004138219
Patent Publication Date (4)
20040715
Application Number (4)
US 2004-466394
Application Date (4)
20040126
Priority Application Information

GB 2001-1577	20010122
WO 2002-EP587	20020122

Priority Patent Number (1)
GB 2001-1577
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20010122
Priority Patent Number (2)
WO 2002-EP587
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20020122
Other Source
MARPAT 137:125092
Graphics



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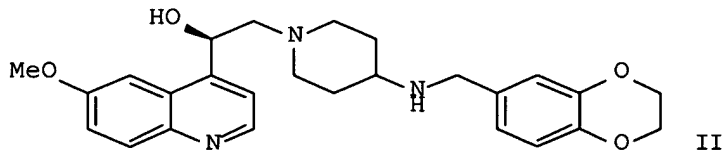


II

Abstract
Title compds. I [wherein one of Z1-Z5 = N, one = CR1a, and the remainder = CH; or one of Z1-Z5 = CR1a and the remainder = CH; R1 and R1a = independently H, OH, or (un)substituted alkoxy; R2 = H or (un) substituted alkyl or alkenyl; R3 = H, carboxy, alkoxycarbonyl, alkenyloxycarbonyl, or (un)substituted aminocarbonyl, alkyl, or ethenyl; R4 = UR5; U = CO, SO2, or CH2; R5 = (un)substituted bicyclic carbocyclic

or heterocyclic ring; n = 0 and AB = (un)substituted NHCO, COCH2, CH2CO, NHSO2, CH2SO2, or CH2CH2; or n = 0 and AB = NHCO, COCH2, CH2CO, NHSO2, CONH, CH2CH2, OCH2, or NHCH2; with provisos; and pharmaceutically derivs. thereof] were prepared for the treatment of gram pos. and gram neg. bacterial infections in mammals, particularly in man. For example, quininone was treated with t-BuOK in t-BuOH and H2O to give 6-methoxyquinoline-4-carboxylic acid (46%), which was converted to (R)-2-(6-methoxyquinoline-4-yl)oxirane over several steps. Reaction with LiClO4 in anhydrous DMF, 4-tert-butoxycarbonylaminopiperidine•HCl, and K2CO3 with heating to 90° for 26 h afforded 4-tert-butoxycarbonylamino-1-[2-(R)-hydroxy-2- (6-methoxyquinoline-4-yl)ethyl]piperidine. Deprotection, condensation with 2,3-dihydrobenzo[1,4]dioxin-6-carboxaldehyde, and conversion to the salt gave II• 2HO2CCO2H. The latter demonstrated antibacterial activity with MIC ≤ 0.125 μM against one or more of the gram pos. and gram neg. bacteria tested.

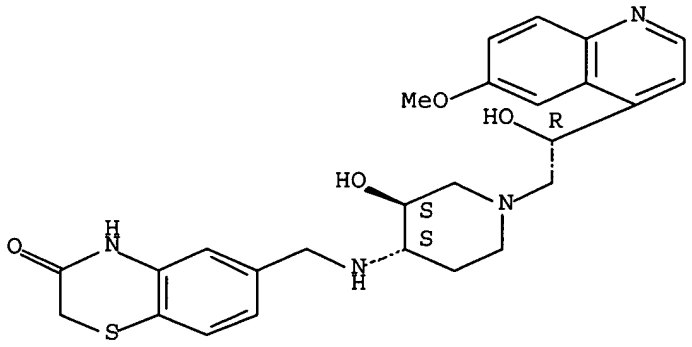
Controlled or Index Terms

443955-94-0P, 6-[[[(3S,4S)-3-Hydroxy-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperidin-4-yl]amino]methyl]-4H-benzo[1,4]thiazin-3-one
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibacterial agent; preparation of piperidinylquinolines and nitrogenated analogs as antibacterial agents)

Hit Structure

CAS Registry Number
443955-94-0 CA

Chemical or Trade Name
2H-1,4-Benzothiazin-3(4H)-one, 6-[[[(3S,4S)-3-hydroxy-1-[(2R)-2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]-4-piperidinyl]amino]methyl]- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Reference Count
3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 15 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
137:63259 CA Full-text

Title

Preparation of piperazines as antibacterials .

Author/Inventor

Dartois, Catherine Genevieve Yvette; Markwell, Roger Edward; Morvan, Marcel; Nadler, Guy Marguerite Marie Gerard; Pearson, Neil David

Patent Assignee/Corporate Source

Smithkline Beecham P.L.C., UK

Source

PCT Int. Appl., 55 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050061	A1	20020627	WO 2001-GB5653	20011219
WO 2002050061	C1	20020725		
AU 2002022287	A5	20020701	AU 2002-22287	20011219
EP 1343780	A1	20030917	EP 2001-271369	20011219
JP 2004518661	T2	20040624	JP 2002-551557	20011219
US 2004077655	A1	20040422	US 2003-450884	20031113

Patent Number (1)

WO 2002050061

Patent Publication Date (1)

20020627

Application Number (1)

WO 2001-GB5653

Application Date (1)

20011219

Patent Number (2)

WO 2002050061

Patent Publication Date (2)

20020725

Patent Number (3)

AU 2002022287

Patent Publication Date (3)

20020701

Application Number (3)

AU 2002-22287

Application Date (3)

20011219

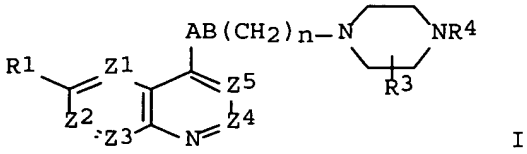
Patent Number (4)

EP 1343780

Patent Publication Date (4)
20030917
Application Number (4)
EP 2001-271369
Application Date (4)
20011219
Patent Number (5)
JP 2004518661
Patent Publication Date (5)
20040624
Application Number (5)
JP 2002-551557
Application Date (5)
20011219
Patent Number (6)
US 2004077655
Patent Publication Date (6)
20040422
Application Number (6)
US 2003-450884
Application Date (6)
20031113
Priority Application Information

GB 2000-31088	20001220
WO 2001-GB5653	20011219

Priority Patent Number (1)
GB 2000-31088
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20001220
Priority Patent Number (2)
WO 2001-GB5653
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20011219
Other Source
MARPAT 137:63259
Graphics



I

Abstract
Title compds. [I; 1 of Z1-Z5 = N, 1 = CR1a, the remainder = CH, 1 of Z1-Z5 = CR1a and the remainder = CH; R1, R1a = H, OH, (substituted) alkoxy, alkoxyalkyl, amino, amidino, etc.; R3 = H, CO2H, alkoxycarbonyl,

cyano, tetrazolyl, (substituted) aminocarbonyl, etc.; R4 = UVR5; R5 = (substituted) bicyclic carbocyclyl, heterocyclyl; U = CO, SO2, CH2, and V = CR17R18; or U = CH2 and V = CO, SO2; R17, R18 = H, (substituted) OH, amino; n = 0, 1; AB = NR11CO, COCR8R9, NHR11SO2, etc.; R8, R9 = H, alkoxy, alkylthio, halo, CF3, N3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, R11 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, (substituted) aminocarbonyl; with provisos], were prepared Thus, (R)-1-[(6-methoxyquinolin-4-yl)-2-piperazin-1-yl]ethanol (preparation given), K2CO3, and 2-(2-bromoethyl)isoindole-1, 3-dione were stirred 3 h in DMF to give 2-[2-[4-[(R)-2-OH-2-(6-methoxyquinolin-4-yl)ethyl]piperazin-1- yl] ethyl]isoindole-1,3-dione. I showed min. inhibitory concns. of ≤0.25 μg/mL against S. aureus Oxford, H. influenzae Q1, E. faecalis 7, etc.

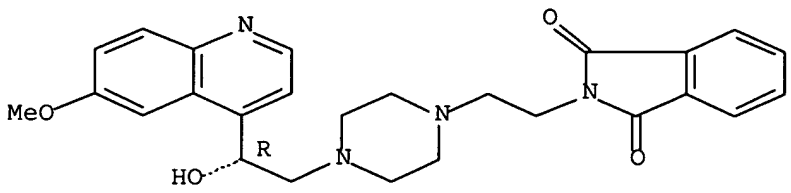
Controlled or Index Terms

439109-92-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazines as antibacterials)

Hit Structure

CAS Registry Number
439109-92-9 CA

Chemical or Trade Name
1H-Isoindole-1,3(2H)-dione, 2-[2-[4-[(2R)-2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Reference Count
4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 16 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
137:47229 CA Full-text

Title
Preparation of piperazinylalkylquinolines as antibacterial agents.

Author/Inventor
Markwell, Roger Edward; Pearson, Neil David; Smethurst, Christian

Patent Assignee/Corporate Source
Smithkline Beecham PLC, UK

Source
PCT Int. Appl., 51 pp. CODEN: PIXXD2

Document Type
Patent

Language

English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050040	A1	20020627	WO 2001-GB5661	20011219
AU 2002016214	A5	20020701	AU 2002-16214	20011219
EP 1343765	A1	20030917	EP 2001-271361	20011219
JP 2004518660	T2	20040624	JP 2002-551537	20011219
US 2004077656	A1	20040422	US 2003-450892	20031113

Patent Number (1)
WO 2002050040
Patent Publication Date (1)
20020627
Application Number (1)
WO 2001-GB5661
Application Date (1)
20011219
Patent Number (2)
AU 2002016214
Patent Publication Date (2)
20020701
Application Number (2)
AU 2002-16214
Application Date (2)
20011219
Patent Number (3)
EP 1343765
Patent Publication Date (3)
20030917
Application Number (3)
EP 2001-271361
Application Date (3)
20011219
Patent Number (4)
JP 2004518660
Patent Publication Date (4)
20040624
Application Number (4)
JP 2002-551537
Application Date (4)
20011219
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US 2004077656
Patent Publication Date (5)
20040422

Application Number (5)
US 2003-450892
Application Date (5)
20031113
Priority Application Information

GB 2000-31086	20001220
WO 2001-GB5661	20011219

Priority Patent Number (1)
GB 2000-31086
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20001220
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WO 2001-GB5661
Priority Kind Code (2)
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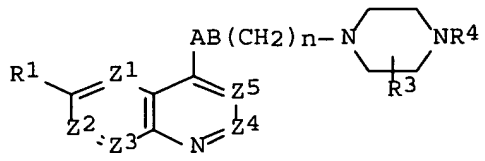
Priority Patent Publication Date (2)
20011219
Other Source
MARPAT 137:47229
Graphics



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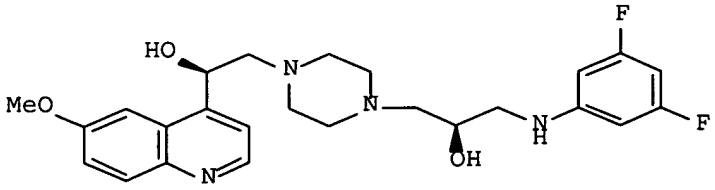


II

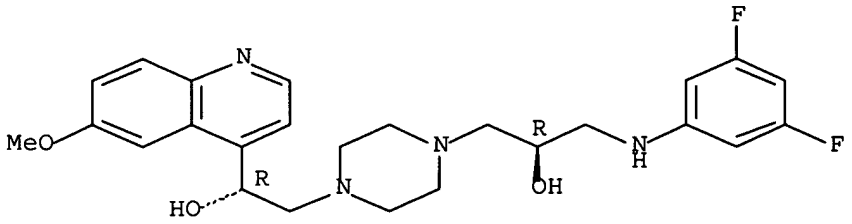
Abstract
Title compds. [I; 1 of Z1-Z5 = H, 1 = CR1a, the rest = CH, or 1 of Z1-Z5 = CR1a, the remainder = CH; R1, R1a = H, OH, (substituted) alkoxy, etc.; R3 = H, CO2H, alkoxycarbonyl, aminocarbonyl, etc.; R4 = VX1X2X3X4; V = CH2, CO, SO2; X1 = CR14R15; X2 = NR13, O, SO2, CR14R15; X3 = NR13, O, CR14R15; R14, R15 = H, alkoxy, alkylthio, CF3, cyano, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, etc.; R14R15 = O; R13 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, aminocarbonyl; X4 = Ph, (substituted) heteroaryl, etc.; n = 0, 1; AB = NR11CO, NR11SO2, COR8R9, etc.; R8, R9 = H, alkoxy, alkylthio, halo, CF3, N3, alkyl, alkenyl, alkoxycarbonyl, etc.; R11 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, aminocarbonyl, etc.; with provisos], were prepared Thus, (R)-1-(6-methoxyquinolin-4-yl)-2-[4-(S)-1-oxiranylmethylpiperazin-1- yl]ethanol and 3,5-difluoroaniline were refluxed 8 h in EtOH to give 12% title compound (II). Several I had min. inhibitory concns. of <8 μg/mL against S aureus Oxford, pneumoniae 1629, etc.
Controlled or Index Terms
438580-20-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazinylalkylquinolines as antibacterial agents)

Hit Structure

CAS Registry Number
438580-20-2 CA

Chemical or Trade Name
1,4-Piperazinediethanol, α-[[(3,5-difluorophenyl)amino]methyl]-α'-(6-methoxy-4-quinolinyl)-, (αR,α'R)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Reference Count
10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 17 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

136:279352 CA Full-text

Title

Preparation and biol. activity of aminopiperidine-containing quinolines as antibacterial agents especially for use in humans

Author/Inventor

Davies, David Thomas; Markwell, Roger Edward; Pearson, Neil David

Patent Assignee/Corporate Source

Smithkline Beecham P.L.C., UK

Source

PCT Int. Appl., 90 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024684	A1	20020328	WO 2001-EP10976	20010919
AU 2002018192	A5	20020402	AU 2002-18192	20010919
EP 1320529	A1	20030625	EP 2001-985253	20010919
EP 1320529	B1	20060524		
JP 2004509885	T2	20040402	JP 2002-529094	20010919
AT 327231	E	20060615	AT 2001-985253	20010919
US 2004053928	A1	20040318	US 2003-380915	20030904

Patent Number (1)

WO 2002024684

Patent Publication Date (1)

20020328

Application Number (1)

WO 2001-EP10976

Application Date (1)

20010919

Patent Number (2)

AU 2002018192

Patent Publication Date (2)

20020402

Application Number (2)

AU 2002-18192

Application Date (2)

20010919

Patent Number (3)
EP 1320529
Patent Publication Date (3)
20030625
Application Number (3)
EP 2001-985253
Application Date (3)
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EP 1320529
Patent Publication Date (4)
20060524
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JP 2004509885
Patent Publication Date (5)
20040402
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Application Date (5)
20010919
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AT 327231
Patent Publication Date (6)
20060615
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Application Date (6)
20010919
Patent Number (7)
US 2004053928
Patent Publication Date (7)
20040318
Application Number (7)
US 2003-380915
Application Date (7)
20030904
Priority Application Information

GB 2000-23211	20000921
GB 2001-1628	20010122
WO 2001-EP10976	20010919

Priority Patent Number (1)
GB 2000-23211
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20000921
Priority Patent Number (2)
GB 2001-1628
Priority Kind Code (2)

A

Priority Patent Publication Date (2)

20010122

Priority Patent Number (3)

WO 2001-EP10976

Priority Kind Code (3)

W

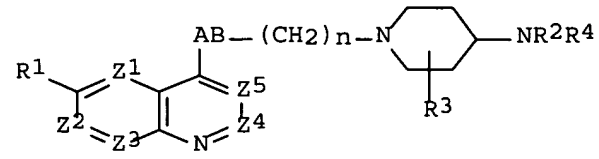
Priority Patent Publication Date (3)

20010919

Other Source

MARPAT 136:279352

Graphics



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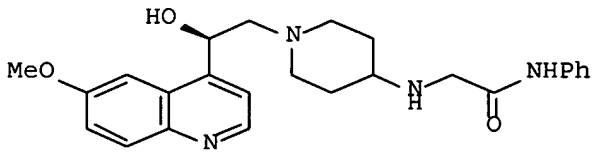


II

Abstract

Title compds. I [one of Z1-Z5 = N, one = CR1a and the remainder = CH; or one or two of Z1-Z5 = independently CR1a and the remainder = CH; R1a, R1 = H, OH, (substituted) alkoxy, halo, alkylthio, CF3, NO2, N3, acyl, acyloxy, acylthio, etc.; R2 = H, (substituted) alkyl, (substituted) alkenyl; R3 = H, CO2H, alkoxycarbonyl, (substituted) aminocarbonyl, alkyl, ethenyl, etc.; R4 = X1X2X3X4; X1 = CH2, CO, SO2; X2 = CR14R15; X3 = O, S, NR13, CR14R15; R14, R15 = H, halo, alkoxy, alkylthio, CF3, cyano, CO2H, formyl, NO2, amino, OH, alkoxy, aminocarbonyl, alkylsulfonyl, etc.; R14R15 = :O; R13 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, aminocarbonyl, etc.; X4 = Ph, halo, CO2H, alkyl, alkoxy, alkenyl, alkoxycarbonyl, formyl, alkylcarbonyl, alkylcarbonyloxy, NO2, cyano, amino, C- or N-linked 5- or 6-membered, substituted heterocycle containing ≤ 4 heteroatoms, etc; n = 0, 1; A = NR11, O, CR6R7; B = NR11, O, SO2, CR8R9; R6-R9 = H, alkoxy, alkylthio, halo, CF3, OH, N3, NH2, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, aminocarbonyl, etc.; R11 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, (substituted) aminocarbonyl], with provisos, were prepared For example, methoxyquinoline derivative II·dioxalate was prepared in several steps from starting materials of (R)-2-(6-methoxyquinolin-4-yl)oxirane, 1,4-dioxa-8-azaspiro- [4,5]-decane, N-Boc-glycine N-hydroxysuccinimide ester and PhNH2. II·dioxalate showed min. inhibitory concentration (MIC) of ≤ 0.25 μg/mL against various strains of bacteria.

Controlled or Index Terms

405934-75-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

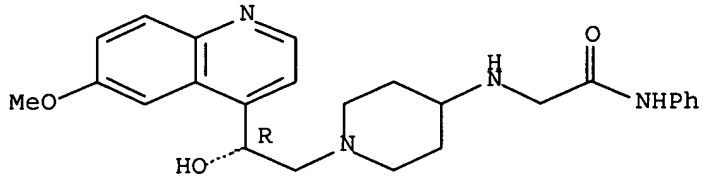
(preparation and antibacterial activity of aminopiperidine-containing quinoline derivs.)

Hit Structure

CAS Registry Number

405934-75-0 CA

Chemical or Trade Name
Acetamide, 2-[[1-[(2R)-2-hydroxy-2-(6-methoxy-4-quinolinyl)ethyl]-4-piperidinyl]amino]-N-phenyl- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.
Reference Count
6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 18 OF 25 CA COPYRIGHT 2006 ACS on STN
Accession Number
136:151082 CA Full-text
Title
Preparation of aminopiperidine quinolines and their azaisosteric analogs having antibacterial activity
Author/Inventor
Davies, David Thomas; Jones, Graham Elgin; Lightfoot, Andrew P.; Markwell, Roger Edward; Pearson, Neil David
Patent Assignee/Corporate Source
Smithkline Beecham P.L.C., UK
Source
PCT Int. Appl., 80 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002008224	A1	20020131	WO 2001-EP8604	20010725
CA 2417192	AA	20020131	CA 2001-2417192	20010725
EP 1305308	A1	20030502	EP 2001-969509	20010725
BR 2001012750	A	20030909	BR 2001-12750	20010725
JP 2004504397	T2	20040212	JP 2002-514130	20010725
NZ 523749	A	20050324	NZ 2001-523749	20010725

ZA 2003000589	A	20040422	ZA 2003-589	20030122
NO 2003000345	A	20030310	NO 2003-345	20030123
US 2004038998	A1	20040226	US 2003-333829	20030828
US 6962917	B2	20051108		
US 2006014749	A1	20060119	US 2005-219148	20050902

Patent Number (1)
WO 2002008224
Patent Publication Date (1)
20020131
Application Number (1)
WO 2001-EP8604
Application Date (1)
20010725
Patent Number (2)
CA 2417192
Patent Publication Date (2)
20020131
Application Number (2)
CA 2001-2417192
Application Date (2)
20010725
Patent Number (3)
EP 1305308
Patent Publication Date (3)
20030502
Application Number (3)
EP 2001-969509
Application Date (3)
20010725
Patent Number (4)
BR 2001012750
Patent Publication Date (4)
20030909
Application Number (4)
BR 2001-12750
Application Date (4)
20010725
Patent Number (5)
JP 2004504397
Patent Publication Date (5)
20040212
Application Number (5)
JP 2002-514130
Application Date (5)
20010725
Patent Number (6)
NZ 523749

Patent Publication Date (6)
20050324
Application Number (6)
NZ 2001-523749
Application Date (6)
20010725
Patent Number (7)
ZA 2003000589
Patent Publication Date (7)
20040422
Application Number (7)
ZA 2003-589
Application Date (7)
20030122
Patent Number (8)
NO 2003000345
Patent Publication Date (8)
20030310
Application Number (8)
NO 2003-345
Application Date (8)
20030123
Patent Number (9)
US 2004038998
Patent Publication Date (9)
20040226
Application Number (9)
US 2003-333829
Application Date (9)
20030828
Patent Number (10)
US 6962917
Patent Publication Date (10)
20051108
Patent Number (11)
US 2006014749
Patent Publication Date (11)
20060119
Application Number (11)
US 2005-219148
Application Date (11)
20050902
Priority Application Information

GB 2000-18351	20000726
GB 2001-1629	20010122
WO 2001-EP8604	20010725
US 2003-333829	20030828

Priority Patent Number (1)

GB 2000-18351
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20000726
Priority Patent Number (2)
GB 2001-1629
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
20010122
Priority Patent Number (3)
WO 2001-EP8604
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20010725
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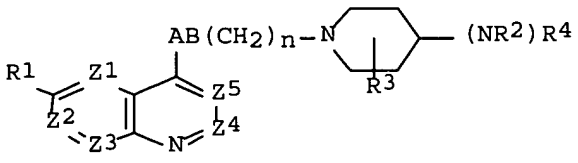
US 2003-333829
Priority Kind Code (4)
A3
Priority Patent Publication Date (4)
20030828
Other Source
MARPAT 136:151082
Graphics



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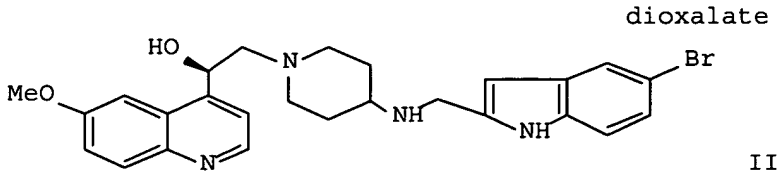


II

Abstract
Aminopiperidine quinoline compds. I (Z1-Z5 = one is N, one (or two independently are) CR1a and the remainder are CH; R1 and R1a = independently are H, OH, NH2, CONH2, halogen, (un)substituted S and SO2, (un)substituted alkyl and alkoxy, etc.; R2 = H, (un)substituted alkyl or alkenyl; R3 = H, CO2H, (un) substituted amino, etc.; R4 = CO, SO2, CH2 attached to an optionally substituted bicyclic, carbocyclic or heterocyclic ring system; n = 0-1; AB = substituted N or C), their salts and pharmaceutically acceptable derivs. were prepared and found to be useful in treating bacterial infections in mammals, especially humans.
Thus II was prepared from 4-amino-1-[2-(R)-hydroxy-2-(6-methoxyquinolin-4- yl)]ethylpiperidine and 5-bromo-1H-indole-2-carboxaldehyde and was determined to have an MIC less than or equal to 32μ g/mL against one or more of gram pos. and neg. bacteria such as S. aureus Oxford and WCUH29 and S.

pneumoniae 1629, N1387 and ERY 2.

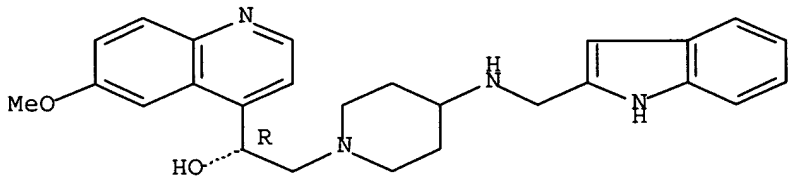
Controlled or Index Terms

394222-56-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of aminopiperidine quinolines and their azaisosteric analogs having antibacterial activity)

Hit Structure

CAS Registry Number
394222-56-1 CA

Chemical or Trade Name
4-Quinolinemethanol, α-[[4-[(1H-indol-2-ylmethyl)amino]-1-piperidinyl]methyl]-6-methoxy-, (αR)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Reference Count
11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 19 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
134:280720 CA Full-text

Title
Quinolylpropylpiperidines with antibacterial activity

Author/Inventor
Malleron, Jean-Luc; Tabart, Michel; Carry, Jean-Christophe; Evers, Michel; El Ahmad, Youssef; Mignani, Serge; Viviani, Fabrice

Patent Assignee/Corporate Source
Aventis Pharma S.A., Fr.

Source
PCT Int. Appl., 305 pp. CODEN: PIXXD2

Document Type
Patent

Language
French

Family Accession Number Count
1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001025227	A2	20010412	WO 2000-FR2541	20000914
WO 2001025227	A3	20011122		
FR 2798656	A1	20010323	FR 1999-11679	19990917
FR 2798656	B1	20041217		
CA 2383836	AA	20010412	CA 2000-2383836	20000914
BR 2000014060	A	20020521	BR 2000-14060	20000914
EP 1218370	A2	20020703	EP 2000-962637	20000914
EP 1218370	B1	20041208		
EE 200200138	A	20030616	EE 2002-138	20000914
JP 2004527448	T2	20040909	JP 2001-528171	20000914
EP 1484328	A1	20041208	EP 2004-19136	20000914
AT 284399	E	20041215	AT 2000-962637	20000914
US 6403610	B1	20020611	US 2000-664959	20000918
NO 2002001253	A	20020424	NO 2002-1253	20020313
ZA 2002002073	A	20030613	ZA 2002-2073	20020313
BG 106524	A	20030131	BG 2002-106524	20020315

Patent Number (1)
WO 2001025227
Patent Publication Date (1)
20010412
Application Number (1)
WO 2000-FR2541
Application Date (1)
20000914
Patent Number (2)
WO 2001025227
Patent Publication Date (2)
20011122
Patent Number (3)
FR 2798656
Patent Publication Date (3)
20010323
Application Number (3)
FR 1999-11679
Application Date (3)

19990917
Patent Number (4)
FR 2798656
Patent Publication Date (4)
20041217
Patent Number (5)
CA 2383836
Patent Publication Date (5)
20010412
Application Number (5)
CA 2000-2383836
Application Date (5)
20000914
Patent Number (6)
BR 2000014060
Patent Publication Date (6)
20020521
Application Number (6)
BR 2000-14060
Application Date (6)
20000914
Patent Number (7)
EP 1218370
Patent Publication Date (7)
20020703
Application Number (7)
EP 2000-962637
Application Date (7)
20000914
Patent Number (8)
EP 1218370
Patent Publication Date (8)
20041208
Patent Number (9)
EE 200200138
Patent Publication Date (9)
20030616
Application Number (9)
EE 2002-138
Application Date (9)
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Patent Number (10)
JP 2004527448
Patent Publication Date (10)
20040909
Application Number (10)
JP 2001-528171
Application Date (10)
20000914
Patent Number (11)
EP 1484328
Patent Publication Date (11)

20041208
Application Number (11)
EP 2004-19136
Application Date (11)
20000914
Patent Number (12)
AT 284399
Patent Publication Date (12)
20041215
Application Number (12)
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Application Date (12)
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Patent Number (13)
US 6403610
Patent Publication Date (13)
20020611
Application Number (13)
US 2000-664959
Application Date (13)
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Patent Number (14)
NO 2002001253
Patent Publication Date (14)
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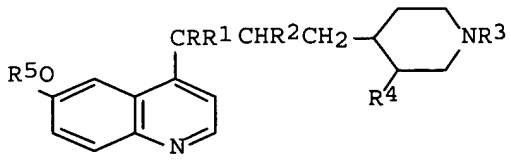
Application Number (14)
NO 2002-1253
Application Date (14)
20020313
Patent Number (15)
ZA 2002002073
Patent Publication Date (15)
20030613
Application Number (15)
ZA 2002-2073
Application Date (15)
20020313
Patent Number (16)
BG 106524
Patent Publication Date (16)
20030131
Application Number (16)
BG 2002-106524
Application Date (16)
20020315
Priority Application Information

FR 1999-11679	19990917
US 1999-162225P	19991029

EP 2000-962637	20000914
WO 2000-FR2541	20000914

Priority Patent Number (1)
FR 1999-11679
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19990917
Priority Patent Number (2)
US 1999-162225P
Priority Kind Code (2)
P
Priority Patent Publication Date (2)
19991029
Priority Patent Number (3)
EP 2000-962637
Priority Kind Code (3)
A3
Priority Patent Publication Date (3)
20000914
Priority Patent Number (4)
WO 2000-FR2541
Priority Kind Code (4)
W
Priority Patent Publication Date (4)
20000914
Other Source
MARPAT 134:280720
Graphics



I

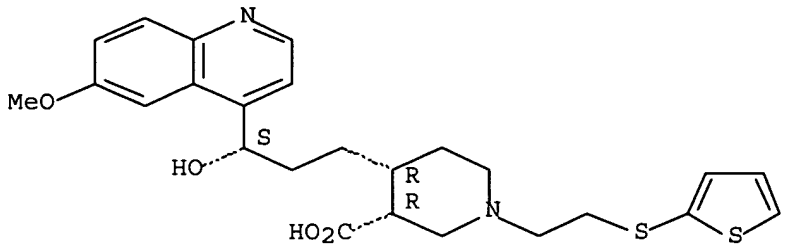
Abstract
Title compds. I [R = H, halogen, OH; R1 = H or halogen when R = halogen; R2 = H; R1R2 = bond, R = H; R3 = (un)substituted alkyl, propargyl, cinnamyl, 4-phenyl-3-butenyl; R4 = (un)esterified CO2H, CH2CO2H, CH2CH2CO2H, CH2OH; R5 = alkyl, alkenyl, alkynyl] were prepared for use as antibacterial agents (no data) . Thus, (3R,4R)-4-[3-(6- methoxyquinolin-4-yl)propyl]-1-(3-phenylpropyl)piperidine-3-carboxylic acid was prepared from (3R,4R)-4-[3-(6-methoxyquinolin-4-yl)propyl]-3- vinylpiperidine by benzoylation, reaction with 1-bromo-3-phenylpropane, and ester hydrolysis.

Controlled or Index Terms
333781-77-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinolylpropylpiperidines with antibacterial activity)

Hit Structure

CAS Registry Number
333781-77-4 CA

Chemical or Trade Name
3-Piperidinecarboxylic acid, 4-[(3S)-3-hydroxy-3-(6-methoxy-4-quinolinyl)propyl]-1-[2-(2-thienylthio)ethyl]-, (3R,4R)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L9 ANSWER 20 OF 25 CA COPYRIGHT 2006 ACS on STN
Accession Number
134:131437 CA Full-text
Title
Preparation of 1-quinolyl-2-aminopiperidinoethanols and analogs as bactericides
Author/Inventor
Davies, David Thomas; Lightfoot, Andrew; Markwell, Roger Edward; Pearson, Neil David
Patent Assignee/Corporate Source
SmithKline Beecham P.L.C., UK
Source
PCT Int. Appl., 37 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001007432	A2	20010201	WO 2000-EP6938	20000717
WO 2001007432	A3	20010525		
EP 1214314	A2	20020619	EP 2000-945938	20000717

EP 1214314	B1	20050907		
JP 2003505455	T2	20030212	JP 2001-512516	20000717
AT 304006	E	20050915	AT 2000-945938	20000717
ES 2246244	T3	20060216	ES 2000-945938	20000717
US 7001913	B1	20060221	US 2002-31844	20020717
US 2006079546	A1	20060413	US 2005-292011	20051201

Patent Number (1)
WO 2001007432
Patent Publication Date (1)
20010201
Application Number (1)
WO 2000-EP6938
Application Date (1)
20000717
Patent Number (2)
WO 2001007432
Patent Publication Date (2)
20010525
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Patent Publication Date (3)
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20050907
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JP 2003505455
Patent Publication Date (5)
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AT 304006
Patent Publication Date (6)
20050915
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AT 2000-945938
Application Date (6)
20000717

Patent Number (7)
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Patent Publication Date (7)
20060216
Application Number (7)
ES 2000-945938
Application Date (7)
20000717
Patent Number (8)
US 7001913
Patent Publication Date (8)
20060221
Application Number (8)
US 2002-31844
Application Date (8)
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Patent Number (9)
US 2006079546
Patent Publication Date (9)
20060413
Application Number (9)
US 2005-292011
Application Date (9)
20051201
Priority Application Information

GB 1999-17408	19990723
WO 2000-EP6938	20000717
US 2002-31844	20020717

Priority Patent Number (1)
GB 1999-17408
Priority Kind Code (1)
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Priority Patent Publication Date (1)
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Priority Kind Code (2)
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Priority Patent Publication Date (2)
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Priority Kind Code (3)
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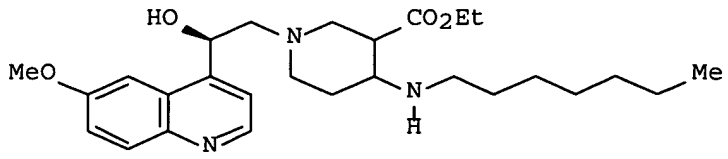
Other Source
MARPAT 134:131437
Graphics



II

Abstract

RZ1Z2(CH2)nZNR2R4 [I; R = (un)substituted 4-quin(az)olinyl, -naphthyridinyl, etc.; R2 = H or (un)substituted alk(en)yl; R4 = (un)substituted alkyl; Z = R3-substituted piperidine-1,4-diyl; R3 = H, alkyl, alkoxycarbonyl, etc.; R2R3,R3R4 = atoms to complete a ring; Z1 = NR11 or CR6R7; Z2 = NR11, O, SO2, CR8R9; R6-R9 = H, halo, alkyl, alkoxycarbonyl, etc.; R11 = H, CF3, alkyl, alkoxycarbonyl, etc.; n = 0-2] were prepared Thus, (R)-6-methoxy-4-quinolyloxirane was condensed with cis-3-ethoxycarbonyl-4-heptylaminopiperidine (preparation each given) to give title compound cis-II. Data for biol. activity of 1 I were given.

Controlled or Index Terms

321997-60-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-quinolyl-2-aminopiperidinoethanols and analogs as bactericides)

Hit Structure

CAS Registry Number
321997-60-8 CA

Chemical or Trade Name
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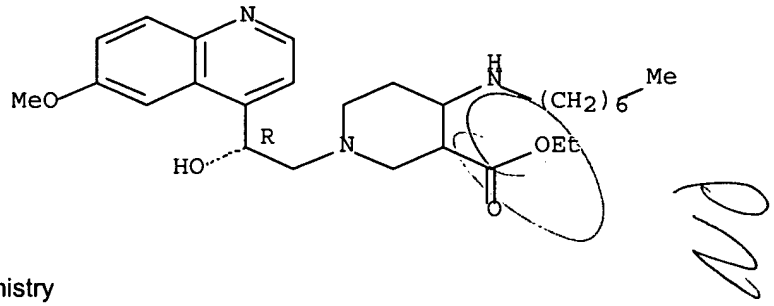


Stereochemistry

Absolute stereochemistry.

L9 ANSWER 21 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

134:71500 CA Full-text

Title

Preparation of 4-(quinolinylalkyl)piperidine-2- alkanols and analogs as antibacterial agents

Author/Inventor

Davies, David Thomas; Markwell, Roger Edward; Pearson, Neil David; Takle, Andrew Kenneth

Patent Assignee/Corporate Source

SmithKline Beecham P.L.C., UK

Source

PCT Int. Appl., 47 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078748	A1	20001228	WO 2000-EP5466	20000613
EP 1187828	A1	20020320	EP 2000-942068	20000613
EP 1187828	B1	20040421		
JP 2003502419	T2	20030121	JP 2001-504914	20000613
AT 264852	E	20040515	AT 2000-942068	20000613
ES 2218175	T3	20041116	ES 2000-942068	20000613
US 6911442	B1	20050628	US 2001-18900	20000613

Patent Number (1)

WO 2000078748

Patent Publication Date (1)

20001228

Application Number (1)

WO 2000-EP5466

Application Date (1)

20000613

Patent Number (2)

EP 1187828

Patent Publication Date (2)

20020320

Application Number (2)

EP 2000-942068

Application Date (2)

20000613

Patent Number (3)

EP 1187828
Patent Publication Date (3)
20040421
Patent Number (4)
JP 2003502419
Patent Publication Date (4)
20030121
Application Number (4)
JP 2001-504914
Application Date (4)
20000613
Patent Number (5)
AT 264852
Patent Publication Date (5)
20040515
Application Number (5)
AT 2000-942068
Application Date (5)
20000613
Patent Number (6)
ES 2218175
Patent Publication Date (6)
20041116
Application Number (6)
ES 2000-942068
Application Date (6)
20000613
Patent Number (7)
US 6911442
Patent Publication Date (7)
20050628
Application Number (7)
US 2001-18900
Application Date (7)
20000613
Priority Application Information

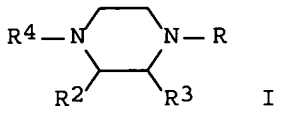
GB 1999-14486	19990621
WO 2000-EP5466	20000613

Priority Patent Number (1)
GB 1999-14486
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19990621
Priority Patent Number (2)
WO 2000-EP5466
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20000613

Other Source

MARPAT 134:71500

Graphics



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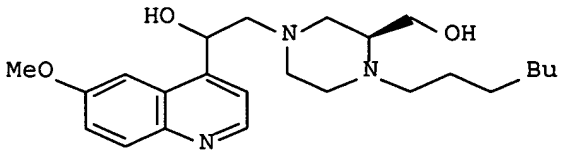


II

Abstract

Title compds. [I; R = (CH2)nZZ1R1; R1 = halo, OH, (un)substituted alkoxy, etc.; 1 of R2,R3 = H, (hydroxy) alkyl, ethynyl, etc. and the other = H; R4 = (un)substituted alkyl; Z = NHCO, COCH2, CH2CH2, etc.; Z1 = (un)substituted quin(az)oline- or -1,m-naphthyridine-4,6-diyl, etc.; m = 5,7,8; n = 0-2] were prepared Thus, piperidine-2-carboxylic acid was optically resolved and the diprotected product converted in 3 steps to (S)-I (R = CO2CMe3, R2 = CH2OH, R3 = R4 = H) which was N-alkylated by heptyl iodide and the deprotected product condensed with 6-methoxyquinoline-4-yloxirane (preparation given) to give title compound II. Data for biol. activity of I were given.

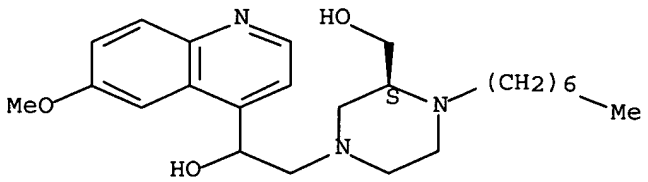
Controlled or Index Terms

314740-87-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-(quinolinylalkyl)piperidine-2-alkanols and analogs as antibacterial agents)

Hit Structure

CAS Registry Number
314740-87-9 CA

Chemical or Trade Name
4-Quinolinemethanol, α-[[(3S)-4-heptyl-3-(hydroxymethyl)-1-piperazinyl]methyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 22 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

133:120244 CA Full-text

Title

Preparation of piperidinylpropylquinolines and related compounds as protein tyrosine kinase inhibitors

Author/Inventor

Davies, David Thomas; Henry, Caroline Joan; Pearson, Neil David

Patent Assignee/Corporate Source

Smithkline Beecham P.L.C., UK

Source

PCT Int. Appl., 53 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043383	A1	20000727	WO 2000-EP350	20000117
EP 1144404	A1	20011017	EP 2000-902605	20000117
JP 2002535323	T2	20021022	JP 2000-594799	20000117

Patent Number (1)

WO 2000043383

Patent Publication Date (1)

20000727

Application Number (1)

WO 2000-EP350

Application Date (1)

20000117

Patent Number (2)

EP 1144404

Patent Publication Date (2)

20011017

Application Number (2)

EP 2000-902605

Application Date (2)

20000117

Patent Number (3)

JP 2002535323

Patent Publication Date (3)

20021022

Application Number (3)

JP 2000-594799

Application Date (3)

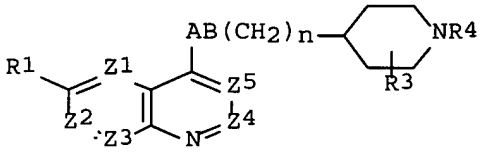
20000117

Priority Application Information

GB 1999-1236	19990120
GB 1999-23936	19991008

WO 2000-EP350	20000117

Priority Patent Number (1)
GB 1999-1236
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19990120
Priority Patent Number (2)
GB 1999-23936
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
19991008
Priority Patent Number (3)
WO 2000-EP350
Priority Kind Code (3)
W
Priority Patent Publication Date (3)
20000117
Other Source
MARPAT 133:120244
Graphics



I

Abstract
A method of treatment of bacterial infection comprises administration of title compds. [I; 1 of Z1-Z5 = N, CR1a, the remainder = CH; R1 = OH, (substituted) alkoxy, alkoxyalkyl, halo, alkyl, alkylthio, CF3, NO2, acyl, acyloxy, N3, etc.; R1a = H, R1; R3 = CO2H, alkoxycarbonyl, aminocarbonyl, cyano, tetrazolyl, oxooxazolidinyl, substituted alkyl, ethenyl, etc.; R4 = CH2R5; R5 = alkyl, hydroxyalkyl, alkoxyalkyl, alkanoyloxyalkyl, (substituted) phenylalkyl, etc.; n = 0-2; AB = NHCONH, NHCO2, or A = NR11, O, S, SO, SO2, CR6R7, B = NR11, O, S, SO, SO2, CR8R9; R6-R9 = H, SH, alkylthio, halo, CF3, alkyl, etc.; R11 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, etc.; with provisos]. Thus, 1-[3R,4R]-1-heptyl-3-(1-(R- or S)-hydroxy-2-cyanoethyl)-4-[3-(6- methoxyquinolin-4-yl)propyl]piperidine, prepared in several steps from quinine, showed min. inhibitory concns. of ≤1 μg/mL against a range of gram-pos. and gram-neg. bacteria.

Controlled or Index Terms

```
233746-45-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of piperidinylpropylquinolines and related compds. as protein
   tyrosine kinase inhibitors)
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Hit Structure

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CAS Registry Number
233746-45-7  CA


Chemical or Trade Name
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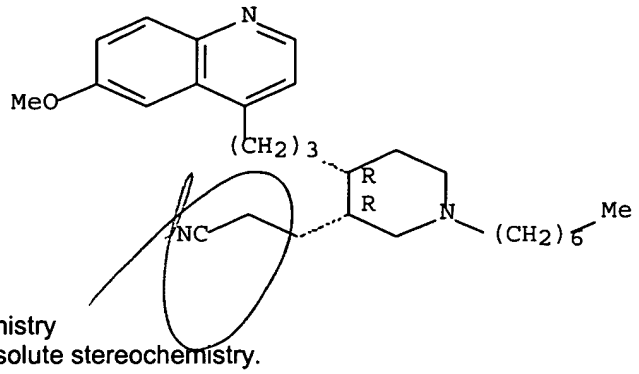
3-Piperidinepropanenitrile, 1-heptyl-4-[3-(6-methoxy-4-quinolinyl)propyl]-, (3R,4R)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Reference Count
1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 23 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number
131:129911 CA Full-text

Title
Preparation of piperidinylalkylquinolines as antibacterials.

Author/Inventor
Coates, William John; Gwynn, Michael Norman; Hatton, Ian Keith; Masters, Philip John; Pearson, Neil David; Rahman, Shahzad Sharooq; Slocombe, Brian; Warrack, Julie Dorothy

Patent Assignee/Corporate Source
Smithkline Beecham PLC, UK

Source
PCT Int. Appl., 88 pp. CODEN: PIXXD2

Document Type
Patent

Language
English

Family Accession Number Count
1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937635	A1	19990729	WO 1999-EP333	19990121
CA 2318842	AA	19990729	CA 1999-2318842	19990121
AU 9927178	A1	19990809	AU 1999-27178	19990121
EP 1051413	A1	20001115	EP 1999-907388	19990121
EP 1051413	B1	20030604		

JP 2002501061	T2	20020115	JP 2000-528558	19990121
ES 2201674	T3	20040316	ES 1999-907388	19990121
ZA 9900520	A	20000725	ZA 1999-520	19990125

Patent Number (1)
WO 9937635
Patent Publication Date (1)
19990729
Application Number (1)
WO 1999-EP333
Application Date (1)
19990121
Patent Number (2)
CA 2318842
Patent Publication Date (2)
19990729
Application Number (2)
CA 1999-2318842
Application Date (2)
19990121
Patent Number (3)
AU 9927178
Patent Publication Date (3)
19990809
Application Number (3)
AU 1999-27178
Application Date (3)
19990121
Patent Number (4)
EP 1051413
Patent Publication Date (4)
20001115
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EP 1999-907388
Application Date (4)
19990121
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Application Date (6)
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Patent Number (7)
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Patent Publication Date (7)
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ES 1999-907388
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ZA 1999-520
Application Date (8)
19990125
Priority Application Information

GB 1998-1630	19980126
GB 1998-21072	19980929
WO 1999-EP333	19990121

Priority Patent Number (1)
GB 1998-1630
Priority Kind Code (1)
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Priority Patent Publication Date (1)
19980126
Priority Patent Number (2)
GB 1998-21072
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
19980929
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WO 1999-EP333
Priority Kind Code (3)
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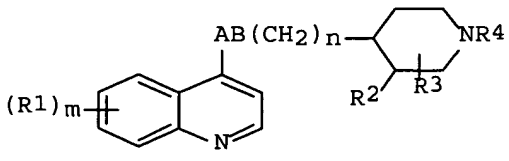
19990121
Other Source
MARPAT 131:129911
Graphics



I

Abstract
A method for treatment of bacterial infection comprises administration of title compds. [I; m = 1, 2; n = 0-2; R1 = OH, (substituted) alkoxy, alkoxyalkyl, halo, alkyl, alkylthio, NO2, N3, acyl, acyloxy, acylthio, etc.; R2 =

H; R3 = H, (substituted) alkyl, alkenyl; R2R3 = :CR5R6; R5, R6 = H, (substituted) alkyl, alkenyl, arealkyl, aralkenyl; R4 = CH2R51; R51 = alkyl, hydroxyalkyl, alkoxyalkyl, tetrahydrofuryl, acylaminoalkyl, cyanoalkyl, (substituted) phenylalkyl, etc.; A = NR11, O, S, SO, SO2, CR6R7; B = NR11, O, S, SO, SO2, CR8R9; R6-R9 = H, SH, alkylthio, halo, CF3, N3, alkyl, alkenyl, alkoxycarbonyl, OH, amino, etc.; R11 = H, CF3, alkyl, alkenyl, alkoxycarbonyl, alkylcarbonyl, etc.; with provisos]. Thus, hydroquinidine hydrochloride was refluxed 48 h in aqueous HOAc to give (3R,4R)-3-ethyl-4-[3-oxo-3-(6-methoxyquinolin-4-yl)propyl]piperidine. The latter was refluxed 7 h with K2CO3 and 1-bromohexane in PhMe to give (3R,4R)-3-ethyl-1-hexyl-4-[3-oxo-3-(6-methoxyquinolin-4- yl)propyl]piperidine. The latter was stirred with NaBH4 in Me2CHOH at -10° to give (3R,4R)-3-ethyl-1-hexyl-4-[3-(R,S)-hydroxy-3-(6- methoxyquinolin-4-yl)propyl]piperidine. The latter showed MIC = 4 μg/mL against E. coli ESS, vs. >64 μg/mL for vancomycin.

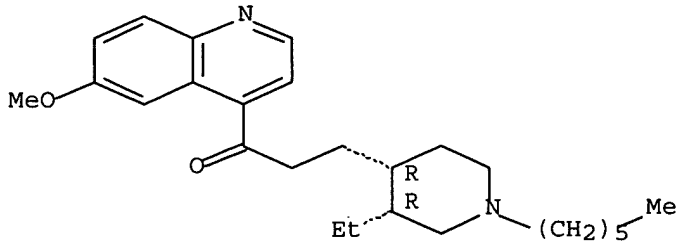
Controlled or Index Terms

233744-85-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidinylalkylquinolines as antibacterials)

Hit Structure

CAS Registry Number
233744-85-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethyl-1-hexyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 24 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

129:316470 CA Full-text

Title

Synthesis and Antibacterial Activity of Ketolides (6-O-Methyl-3-oxoerythromycin Derivatives): A New Class of Antibacterials Highly Potent Against Macrolide-Resistant and -Susceptible Respiratory Pathogens

Author/Inventor

Agouridas, Constantin; Denis, Alexis; Auger, Jean-Michel; Benedetti, Yannick; Bonnefoy, Alain; Bretin, Francois; Chantot, Jean-Francois; Dussarat, Arlette; Fromentin, Claude; D'Ambrieres, Solange Gouin; Lachaud, Sylvette; Laurin, Patrick; Martret, Odile Le; Loyau, Veronique; Tessot, Nicole

Patent Assignee/Corporate Source

Medicinal Chemistry Core Research Functions and Anti-Infectives Diseases Group, Hoechst Marion Roussel, Romainville, 93235, Fr.

Source

Journal of Medicinal Chemistry (1998), 41(21), 4080-4100 CODEN: JMCMAR; ISSN: 0022-2623

Document Type

Journal

Language

English

Abstract

In the search for new antibiotics active against macrolide-resistant pneumococci and Haemophilus influenzae, we synthesized a new class of 3-oxo-6-O-methylerythromycin derivs., so-called "ketolides". A keto function was introduced in position 3 after removal of L-cladinose, a sugar which has long been thought essential. Further modifications of the macrolactone backbone allowed us to obtain three different series of 9-oxime, 11,12-carbamate, and 11,12-hydrazonocarbamate ketolides. These compds. were found to be very active against penicillin/erythromycin- resistant pneumococci and noninducers of MLSB resistance. The 11,12-substituted ketolide 61 (HMR 3004) demonstrated a potent activity against multiresistant pneumococci associated with a well-balanced activity against all bacteria involved in respiratory infections including H. influenzae, Mycoplasma catarrhalis, group A streptococci, and atypical bacteria. In addition HMR 3004 displayed high therapeutic activity in animals infected by all major strains, irresp. of their resistance phenotype.

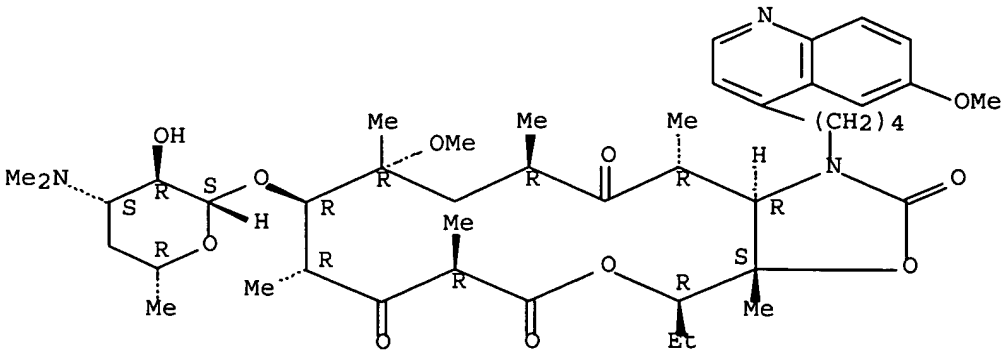
Controlled or Index Terms

214694-81-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and antibacterial activity of ketolides methyloxoerythromycins as highly potent against macrolide-resistant and susceptible respiratory pathogens)

Hit Structure

CAS Registry Number
214694-81-2 CA

Chemical or Trade Name
2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyloctahydro-11-methoxy-1-[4-(6-methoxy-4-quinolinyl)butyl]-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-β-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.
Publisher
American Chemical Society
Reference Count
103 THERE ARE 103 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 25 OF 25 CA COPYRIGHT 2006 ACS on STN

Accession Number

129:166212 CA Full-text

Title

Solid lipid particles, particles of bioactive agents and methods for the manufacture and use thereof

Author/Inventor

Westesen, Kirsten; Siekmann, Britta

Patent Assignee/Corporate Source

Pharmacia and Upjohn AB, Swed.

Source

U.S., 32 pp., Cont.-in-part of U.S. Ser. No. 141,058, abandoned. CODEN: USXXAM

Document Type

Patent

Language

English

Family Accession Number Count

2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5785976	A	19980728	US 1994-226471	19940412
CA 2091152	AA	19940906	CA 1993-2091152	19930305
CA 2091152	C	20050503		
US 5885486	A	19990323	US 1996-757276	19961202
US 6207178	B1	20010327	US 1998-204075	19981203

Patent Number (1)

US 5785976

Patent Publication Date (1)

19980728

Application Number (1)

US 1994-226471

Application Date (1)

19940412

Patent Number (2)

CA 2091152

Patent Publication Date (2)

19940906

Application Number (2)

CA 1993-2091152

Application Date (2)

19930305

Patent Number (3)

CA 2091152

Patent Publication Date (3)

20050503

Patent Number (4)

US 5885486
Patent Publication Date (4)
19990323
Application Number (4)
US 1996-757276
Application Date (4)
19961202
Patent Number (5)
US 6207178
Patent Publication Date (5)
20010327
Application Number (5)
US 1998-204075
Application Date (5)
19981203
Priority Application Information

CA 1993-2091152	19930305
US 1993-27501	19930305
US 1993-141058	19931026
US 1994-226471	19940412
US 1996-757276	19961202

Priority Patent Number (1)
CA 1993-2091152
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19930305
Priority Patent Number (2)
US 1993-27501
Priority Kind Code (2)
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Priority Patent Publication Date (2)
19930305
Priority Patent Number (3)
US 1993-141058
Priority Kind Code (3)
B2
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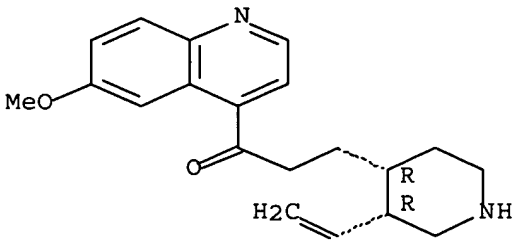
19931026
Priority Patent Number (4)
US 1994-226471
Priority Kind Code (4)
A1
Priority Patent Publication Date (4)
19940412
Priority Patent Number (5)
US 1996-757276

Priority Kind Code (5)
A1
Priority Patent Publication Date (5)
19961202
Abstract
The present invention is in the area of administration forms and delivery systems for drugs, vaccines and other biol. active agents. More specifically the invention is related to the preparation of suspensions of colloidal solid lipid particles (SLPs) of predominantly an isometrical shape with the lipid matrix being in a stable polymorphic modification and of suspensions of micron and submicron particles of bioactive agents (PBAs); as well as to the use of such suspensions or the lyophilizates thereof as delivery systems primarily for the parenteral administration of preferably poorly water-soluble bioactive substances, particularly drugs, and to their use in cosmetic, food and agricultural products. SLPs and PBAs are prepared by the following emulsification process: (1) a solid lipid or bioactive agent or a mixture of solid lipids or bioactive agents is melted; (2) stabilizers are added either to the lipid or bioactive agent and to the aqueous phase or to the aqueous phase only depending on their physicochem. characteristics; (3) drugs or other bioactive substances to be incorporated into the SLPs may be melted together with the lipids if the physicochem. characteristics of the substance permit or may be dissolved, solubilized or dispersed in the lipid melt before homogenization; (4) the aqueous phase is heated to the temperature of the melt before mixing and may contain for example stabilizers, isotonicity agents, buffering substances, cryoprotectants and/or preservatives; (5) the molten lipid compds. and the bioactive agents are emulsified in an aqueous phase preferably by high-pressure homogenization. For example, soybean lecithin was dispersed into a melted tripalmitin and estramustine was dissolved in the dispersion. An aqueous mixture containing Na glycocholate and glycerol in water was added to the above dispersion to obtain a crude emulsion, which was passed through a high-pressure homogenizer to obtain a stable dispersion.
Controlled or Index Terms
84-55-9, Viquidil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manufacture of solid lipid particles for controlled delivery of poorly water-soluble bioactive agents)
Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.
Reference Count
26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L12 ANSWER 1 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

140:309361 CA Full-text

Title

Preparation of water-soluble vaginal contraceptive

Author/Inventor

Dwivedi, Anil Kumar; Pal, Raghwendra; Sing, Satyawan; Setty, Bachu Sreenivasulu; Kamboj, Ved Prakash; Khanna, Nandoo Mal

Patent Assignee/Corporate Source

Council of Scientific and Industrial Research, India

Source

Indian, 9 pp. CODEN: INXXAP

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 184896	A	20001007	IN 1996-DE1027	19960516

Patent Number (1)

IN 184896

Patent Publication Date (1)

20001007

Application Number (1)

IN 1996-DE1027

Application Date (1)

19960516

Priority Application Information

IN 1996-DE1027	19960516

Priority Patent Number (1)

IN 1996-DE1027

Priority Patent Publication Date (1)

19960516

Abstract

A process for the preparation of water soluble vaginal contraceptive having pH independent activity is described. The spermicidal agent was selected from substituted quinotoxine derivs., e.g., 1-(6'-methoxy-4'-quinolinyl)-3- [3"-vinyl-1"-(dialkyl or heterocyclic aminoalkyl) or alkyl-4"-piperidyl]-2- methylene propan-1-one or from appropriately substituted styrylamine Me ketones like 1-aryl or alkyl-4-substituted aminomethylpenta-1,4-dien-3- ones or their water soluble salts. A spermicidal agent 5-15% by weight was mixed with a mixture of polyethylene glycols 85-95% by weight, and the mixture had a m.p. above 40°. Thus, a mixture of PEG-1500 300, PEG-4000 200 and PEG-6000 500 mg and hexane 0.1 mL was melted. 1-(6'-Methoxy-4'-quinolinyl)-3-[3"-vinyl-1"(n-propyl)-4"-piperidyl]-2-methylenepropan-1-one tartrate 60 mg in 2 mL ethanol was added to PEG mixture and mixed. The mixture was warmed to 60° and cooled to obtain an oval suppository.

Controlled or Index Terms

676544-46-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(water soluble vaginal contraceptive)

Hit Structure

CAS Registry Number
676544-46-0 CA

Chemical or Trade Name
2-Propen-1-one, 2-[[1-[3-(dimethylamino)propyl]-3-ethenyl-4-piperidinyl]methyl]-1-(6-methoxy-4-quinolinyl)-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

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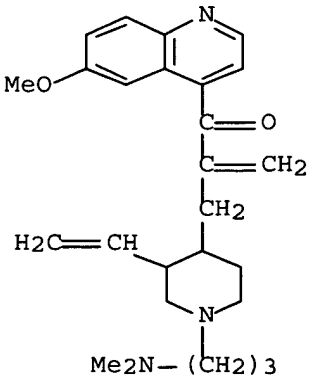
CRN 613665-32-0
CMF C26 H35 N3 O2



CM
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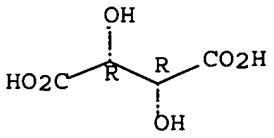
CRN 87-69-4
CMF C4 H6 O6



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 2 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
138:4598 CA Full-text
Title
Preparation of substituted 5,6-dihydro-4H-pyrrolo[1,2- b]pyrazoles as TGF-β signal transduction inhibitors
Author/Inventor
Sawyer, Jason Scott; Beight, Douglas Wade; Ciapetti, Paola; Decollo, Todd Vincent; Godfrey, Alexander Glenn; Goodson, Theodore, Jr.; Herron, David Kent; Li, Hong-yu; Liao, Junkai; Mcmillen, William Thomas; Miller, Shawn Christopher; Mort, Nicolas Anthony; Yingling, Jonathan Michael; Smith, Edward C. R.
Patent Assignee/Corporate Source
Eli Lilly and Company, USA; et al.
Source
PCT Int. Appl., 305 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002094833	A1	20021128	WO 2002-US11884	20020513
CA 2446820	AA	20021128	CA 2002-2446820	20020513
EP 1397364	A1	20040317	EP 2002-744115	20020513
BR 2002009939	A	20040330	BR 2002-9939	20020513
CN 1511157	A	20040707	CN 2002-810508	20020513
JP 2004535404	T2	20041125	JP 2002-591506	20020513
NZ 528525	A	20051028	NZ 2002-528525	20020513
ZA 2003008546	A	20050131	ZA 2003-8546	20031031
US 2004106604	A1	20040603	US 2003-477111	20031106
US 7087626	B2	20060808		

	NO 2003005193	A	20031121	NO 2003-5193	20031121

Patent Number (1)
WO 2002094833
Patent Publication Date (1)
20021128
Application Number (1)
WO 2002-US11884
Application Date (1)
20020513
Patent Number (2)
CA 2446820
Patent Publication Date (2)
20021128
Application Number (2)
CA 2002-2446820
Application Date (2)
20020513
Patent Number (3)
EP 1397364
Patent Publication Date (3)
20040317
Application Number (3)
EP 2002-744115
Application Date (3)
20020513
Patent Number (4)
BR 2002009939
Patent Publication Date (4)
20040330
Application Number (4)
BR 2002-9939
Application Date (4)
20020513
Patent Number (5)
CN 1511157
Patent Publication Date (5)
20040707
Application Number (5)
CN 2002-810508
Application Date (5)
20020513
Patent Number (6)
JP 2004535404
Patent Publication Date (6)
20041125
Application Number (6)
JP 2002-591506
Application Date (6)
20020513
Patent Number (7)
NZ 528525

Patent Publication Date (7)
20051028
Application Number (7)
NZ 2002-528525
Application Date (7)
20020513
Patent Number (8)
ZA 2003008546
Patent Publication Date (8)
20050131
Application Number (8)
ZA 2003-8546
Application Date (8)
20031031
Patent Number (9)
US 2004106604
Patent Publication Date (9)
20040603
Application Number (9)
US 2003-477111
Application Date (9)
20031106
Patent Number (10)
US 7087626
Patent Publication Date (10)
20060808
Patent Number (11)
NO 2003005193
Patent Publication Date (11)
20031121
Application Number (11)
NO 2003-5193
Application Date (11)
20031121
Priority Application Information

US 2001-293464P	20010524
WO 2002-US11884	20020513

Priority Patent Number (1)
US 2001-293464P
Priority Kind Code (1)
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Priority Patent Publication Date (1)
20010524
Priority Patent Number (2)
WO 2002-US11884
Priority Kind Code (2)
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20020513
Other Source

MARPAT 138:4598

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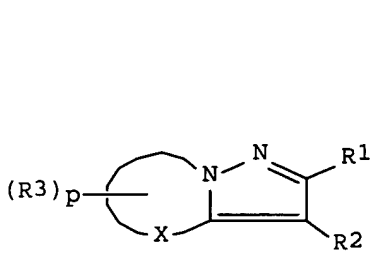

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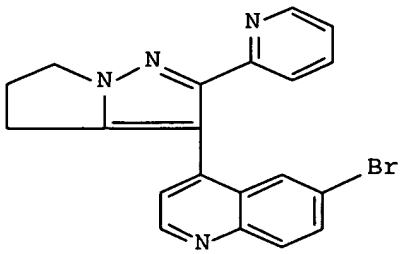


II

Abstract

Title compds. I [R1 = Ph, pyridine, pyridine-N-oxide, quinoline, naphthyridine, etc.; R2 = quinoline, quinoline-N-oxide, naphthalene, pyridine, pyridine-N-oxide, quinazoline, etc.; p = 1-8; R3 = H, alkyl, alkylhydroxy, hydroxy, dialkylamino, etc.; X = C, O, S] were prepared For instance, 1-[[2-(6-Bromoquinolin-4-yl)-1-(pyridin-2- yl)ethylidene]amino]pyrrolidin-2-one (preparation given) was treated with NaH in DMF at 80-85° for 18 h to afford II in 54% yield. Selected compds. of the invention had IC50 < 20.00 μM for the TGF-β type I receptor.

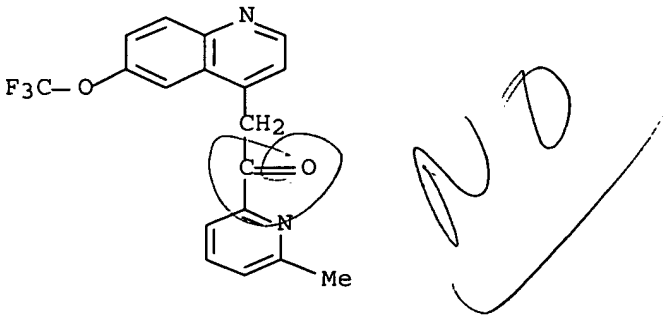
Controlled or Index Terms

476472-32-9P, 2-(6-Trifluoromethoxyquinolin-4-yl)-1-(6-methylpyridin-2-yl)ethanone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (hetero)aromatic substituted 5,6-dihydro-4H-pyrrolo[1,2-b]pyrazoles as TGF-β signal transduction inhibitors)

Hit Structure

CAS Registry Number
476472-32-9 CA

Chemical or Trade Name
Ethanone, 1-(6-methyl-2-pyridinyl)-2-[6-(trifluoromethoxy)-4-quinolinyl]-(9CI) (CA INDEX NAME)



Reference Count

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
137:333176 CA Full-text
Title
As-needed administration of tricyclic and other non-SRI antidepressant drugs to treat premature ejaculation
Author/Inventor
Tam, Peter; Gesundheit, Neil; Wilson, Leland F.
Patent Assignee/Corporate Source
Vivus, Inc., USA
Source
U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 721,412. CODEN: USXXCO
Document Type
Patent
Language
English
Family Accession Number Count
2
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002161016	A1	20021031	US 2001-996407	20011121
US 6946141	B2	20050920		
US 6495154	B1	20021217	US 2000-721412	20001121

Patent Number (1)
US 2002161016
Patent Publication Date (1)
20021031
Application Number (1)
US 2001-996407
Application Date (1)
20011121
Patent Number (2)
US 6946141
Patent Publication Date (2)
20050920
Patent Number (3)
US 6495154
Patent Publication Date (3)
20021217
Application Number (3)
US 2000-721412
Application Date (3)
20001121
Priority Application Information

US 2000-721412	20001121

Priority Patent Number (1)
US 2000-721412
Priority Kind Code (1)
A2

Priority Patent Publication Date (1)

20001121

Abstract

A method is provided for treatment of premature ejaculation by administration of an antidepressant drug selected from tricyclic antidepressants, tetracyclic antidepressants, MAO inhibitors, azaspirone antidepressants, and atypical non-SRI antidepressants. In a preferred embodiment, administration is on as "as-needed" basis, i.e., the drug is administered immediately or at most several hours prior to sexual activity. Pharmaceutical formulations and packaged kits are also provided.

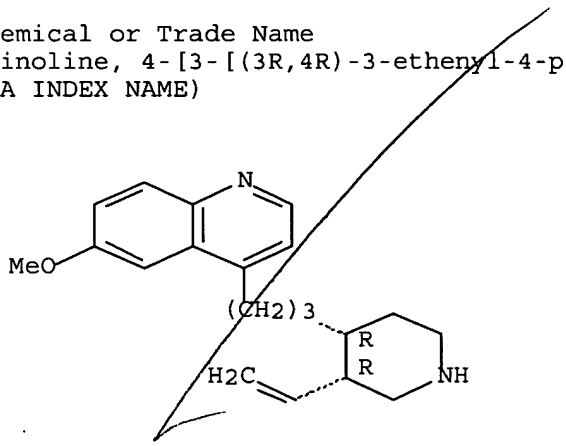
Controlled or Index Terms

72714-74-0, Viqualine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidepressant drugs for treatment of premature ejaculation)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 4 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
136:406871 CA Full-text
Title
As-needed administration of tricyclic and other non-SRI antidepressant drugs to treat premature ejaculation
Author/Inventor
Tam, Peter; Gesundheit, Neil; Wilson, Leland F.
Patent Assignee/Corporate Source
Vivus, Inc., USA
Source
PCT Int. Appl., 40 pp. CODEN: PIXXD2
Document Type
Patent
Language
English
Family Accession Number Count
2
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002041883	A2	20020530	WO 2001-US44065	20011121
WO 2002041883	A3	20031218		
US 6495154	B1	20021217	US 2000-721412	20001121
CA 2429516	AA	20020530	CA 2001-2429516	20011121
AU 2002028643	A5	20020603	AU 2002-28643	20011121
EP 1389115	A2	20040218	EP 2001-989759	20011121
JP 2004536024	T2	20041202	JP 2002-544062	20011121

Patent Number (1)
WO 2002041883
Patent Publication Date (1)
20020530
Application Number (1)
WO 2001-US44065
Application Date (1)
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Patent Number (2)
WO 2002041883
Patent Publication Date (2)
20031218
Patent Number (3)
US 6495154
Patent Publication Date (3)
20021217
Application Number (3)

US 2000-721412
Application Date (3)
20001121
Patent Number (4)
CA 2429516
Patent Publication Date (4)
20020530
Application Number (4)
CA 2001-2429516
Application Date (4)
20011121
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Patent Publication Date (5)
20020603
Application Number (5)
AU 2002-28643
Application Date (5)
20011121
Patent Number (6)
EP 1389115
Patent Publication Date (6)
20040218
Application Number (6)
EP 2001-989759
Application Date (6)
20011121
Patent Number (7)
JP 2004536024
Patent Publication Date (7)
20041202
Application Number (7)
JP 2002-544062
Application Date (7)
20011121
Priority Application Information

US 2000-721412	20001121
WO 2001-US44065	20011121

Priority Patent Number (1)
US 2000-721412
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
20001121
Priority Patent Number (2)
WO 2001-US44065
Priority Kind Code (2)
W
Priority Patent Publication Date (2)
20011121

Abstract

A method is provided for treatment of premature ejaculation by administration of an antidepressant drug selected from tricyclic antidepressants, tetracyclic antidepressants, MAO inhibitors, azaspirone antidepressants, and atypical non-SRI antidepressants. In a preferred embodiment, administration is on as "as-needed" basis, i.e., the drug is administered immediately or at most several hours prior to sexual activity. Pharmaceutical formulations and packaged kits are also provided. An effervescent tablet contained clomipramine hydrochloride 300, sodium bicarbonate 1985, and citric acid 1000 mg. Efficacy of the compns. were tested in volunteers.

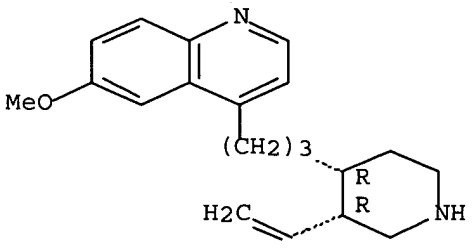
Controlled or Index Terms

72714-74-0, Viqualine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as-needed administration of tricyclic and other non-SRI antidepressant drugs to treat premature ejaculation)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 5 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

136:284433 CA Full-text

Title

Administration of phosphodiesterase inhibitors for the treatment of premature ejaculation

Author/Inventor

Wilson, Leland F.; Doherty, Paul C.; Place, Virgil A.; Smith, William L.; Abdel-Hamid, Abdou Ali Ibrahim Aboubakr

Patent Assignee/Corporate Source

USA

Source

U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 467,094. CODEN: USXXCO

Document Type

Patent

Language

English

Family Accession Number Count
7
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002037828	A1	20020328	US 2001-888250	20010621
US 6403597	B2	20020611		
US 6037346	A	20000314	US 1998-181070	19981027
US 6548490	B1	20030415	US 1999-467094	19991210
CA 2451152	AA	20030103	CA 2002-2451152	20020325
WO 2003000343	A2	20030103	WO 2002-US9415	20020325
WO 2003000343	A3	20040325		
EP 1418896	A2	20040519	EP 2002-717729	20020325
JP 2005519851	T2	20050707	JP 2003-506984	20020325
AU 2005248938	A1	20060202	AU 2005-248938	20051223

Patent Number (1)
US 2002037828
Patent Publication Date (1)
20020328
Application Number (1)
US 2001-888250
Application Date (1)
20010621
Patent Number (2)
US 6403597
Patent Publication Date (2)
20020611
Patent Number (3)
US 6037346
Patent Publication Date (3)
20000314
Application Number (3)
US 1998-181070
Application Date (3)
19981027
Patent Number (4)
US 6548490
Patent Publication Date (4)
20030415
Application Number (4)
US 1999-467094
Application Date (4)
19991210

Patent Number (5)
CA 2451152
Patent Publication Date (5)
20030103
Application Number (5)
CA 2002-2451152
Application Date (5)
20020325
Patent Number (6)
WO 2003000343
Patent Publication Date (6)
20030103
Application Number (6)
WO 2002-US9415
Application Date (6)
20020325
Patent Number (7)
WO 2003000343
Patent Publication Date (7)
20040325
Patent Number (8)
EP 1418896
Patent Publication Date (8)
20040519
Application Number (8)
EP 2002-717729
Application Date (8)
20020325
Patent Number (9)
JP 2005519851
Patent Publication Date (9)
20050707
Application Number (9)
JP 2003-506984
Application Date (9)
20020325
Patent Number (10)
AU 2005248938
Patent Publication Date (10)
20060202
Application Number (10)
AU 2005-248938
Application Date (10)
20051223
Priority Application Information

US 1997-958816	19971028
US 1998-181070	19981027
US 1999-467094	19991210

AU 2001-22566	20001208
US 2001-888250	20010621
WO 2002-US9415	20020325

Priority Patent Number (1)
US 1997-958816
Priority Kind Code (1)
B2
Priority Patent Publication Date (1)
19971028
Priority Patent Number (2)
US 1998-181070
Priority Kind Code (2)
A2
Priority Patent Publication Date (2)
19981027
Priority Patent Number (3)
US 1999-467094
Priority Kind Code (3)
A2
Priority Patent Publication Date (3)
19991210
Priority Patent Number (4)
AU 2001-22566
Priority Kind Code (4)
A3
Priority Patent Publication Date (4)
20001208
Priority Patent Number (5)
US 2001-888250
Priority Kind Code (5)
A
Priority Patent Publication Date (5)
20010621
Priority Patent Number (6)
WO 2002-US9415
Priority Kind Code (6)
W
Priority Patent Publication Date (6)
20020325

Abstract

A method is provided for treatment of premature ejaculation by administration of a phosphodiesterase inhibitor, e.g., an inhibitor of a Type III, Type IV, or Type V phosphodiesterase. In a preferred embodiment, administration is on as "as needed" basis, i.e., the drug is administered immediately or several hours prior to sexual activity. Pharmaceutical formulations and packaged kits are also provided. Zaprinast 1.0, mannitol 1.0, microcryst. cellulose 2.0, and magnesium stearate 10 mg are blended in a suitable mixer and then compressed into sublingual tablets. Each sublingual tablet contains 10 mg zaprinast.

Controlled or Index Terms

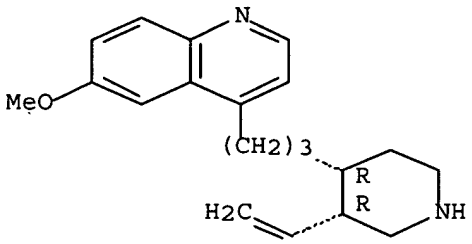
72714-74-0, Viqualine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(administration of phosphodiesterase inhibitors for treatment

of premature ejaculation)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 6 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
130:21652 CA Full-text

Title
Substance dependence treatment using opiate antagonists and serotonin compounds

Author/Inventor
Krishnan-Sarin, Suchitra; O'Malley, Stephanie; Farren, Conor

Patent Assignee/Corporate Source
Yale University, USA

Source
PCT Int. Appl., 20 pp. CODEN: PIXXD2

Document Type
Patent

Language
English

Family Accession Number Count
1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9852565	A1	19981126	WO 1998-US10289	19980519
CA 2290788	AA	19981126	CA 1998-2290788	19980519
AU 9875824	A1	19981211	AU 1998-75824	19980519

EP 1011671	A1	20000628	EP 1998-923558	19980519
JP 2002508753	T2	20020319	JP 1998-550563	19980519

Patent Number (1)
WO 9852565
Patent Publication Date (1)
19981126
Application Number (1)
WO 1998-US10289
Application Date (1)
19980519
Patent Number (2)
CA 2290788
Patent Publication Date (2)
19981126
Application Number (2)
CA 1998-2290788
Application Date (2)
19980519
Patent Number (3)
AU 9875824
Patent Publication Date (3)
19981211
Application Number (3)
AU 1998-75824
Application Date (3)
19980519
Patent Number (4)
EP 1011671
Patent Publication Date (4)
20000628
Application Number (4)
EP 1998-923558
Application Date (4)
19980519
Patent Number (5)
JP 2002508753
Patent Publication Date (5)
20020319
Application Number (5)
JP 1998-550563
Application Date (5)
19980519
Priority Application Information

US 1997-46162P	19970520
WO 1998-US10289	19980519

Priority Patent Number (1)
US 1997-46162P
Priority Kind Code (1)

P

Priority Patent Publication Date (1)

19970520

Priority Patent Number (2)

WO 1998-US10289

Priority Kind Code (2)

W

Priority Patent Publication Date (2)

19980519

Abstract

Patients are treated for alc., marijuana, cocaine, opiate and polysubstance dependency by administration of combination of an effective amount of an opioid antagonist such as nalmefene, naloxone, naltrexone, or a mixture of any of these, and a serotonergic medication, such as sertraline, fluoxetine, paroxetine, fluvoxamine, or ondansetron. Administration of an effective amount of an opioid antagonist alone helps to prevent relapse after detoxification is complete, and addition of the serotonergic medication increases the effectiveness, decreases the side effects of the opioid antagonist, and also helps relieve effects of withdrawal.

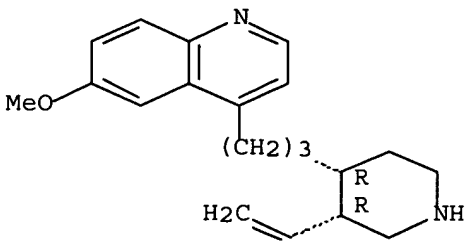
Controlled or Index Terms

72714-74-0, Viqualine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substance dependence treatment using opiate antagonists and serotonin compds.)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Reference Count

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

125:265993 CA Full-text

Title

A process for the preparation of 1-(6-methoxy-4- quinolinyl)-3-(3-vinyl-4(substituted-aminoacetyl)-4-piperidinyl)-2-methylenepropan-1-ones and their water soluble salts

Author/Inventor

Khanna, Nandoo Mal; Shukla, Vinay Kumar; Dwivedi, Anil Kumar; Getty, B. S.; Kamboj, V. P.

Patent Assignee/Corporate Source

Council of Scientific and Industrial Research, India

Source

Indian, 11 pp. CODEN: INXXAP

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 173760	A	19940709	IN 1990-DE172	19900226

Patent Number (1)

IN 173760

Patent Publication Date (1)

19940709

Application Number (1)

IN 1990-DE172

Application Date (1)

19900226

Priority Application Information

IN 1990-DE172	19900226

Priority Patent Number (1)

IN 1990-DE172

Priority Patent Publication Date (1)

19900226

Abstract

The title compds. are prepared from quinicine by chloroacetylation followed by reaction with the resp. amines and finally by treatment with paraformaldehyde in HOAc. These compds. showed spermicidal activity.

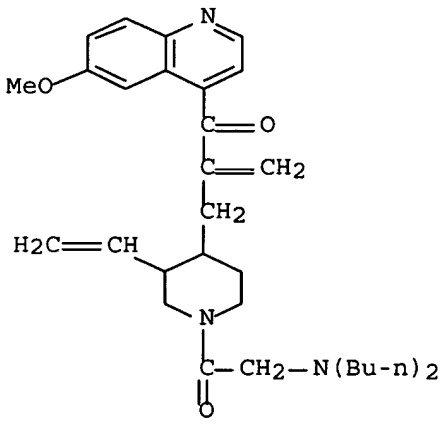
Controlled or Index Terms

182250-21-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and spermicidal activity of quinolinylvinylpiperidinylpropanones)

Hit Structure

CAS Registry Number
182250-21-1 CA

Chemical or Trade Name
Piperidine, 1-[(dibutylamino)acetyl]-3-ethenyl-4-[2-[(6-methoxy-4-quinolinyl)carbonyl]-2-propenyl]- (9CI) (CA INDEX NAME)


N
MeO
C═O
C═CH2
CH2
H2C═CH
N
C—CH2—N(Bu-n)2
O

L12 ANSWER 8 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

121:286599 CA Full-text

Title

Suspension of solid lipid particles as carrier for bioactive agents

Author/Inventor

Westesen, Kirsten; Siekmann, Britta

Patent Assignee/Corporate Source

Pharmacia AB, Swed.

Source

PCT Int. Appl., 78 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Family Accession Number Count

2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420072	A1	19940915	WO 1994-SE185	19940304
CA 2113795	AA	19950720	CA 1994-2113795	19940119
AU 9462253	A1	19940926	AU 1994-62253	19940304
AU 676279	B2	19970306		
EP 687172	A1	19951220	EP 1994-909393	19940304
EP 687172	B1	20021204		
JP 08507515	T2	19960813	JP 1994-519887	19940304
AT 228821	E	20021215	AT 1994-909393	19940304
PT 687172	T	20030430	PT 1994-909393	19940304
ES 2190439	T3	20030801	ES 1994-909393	19940304
FI 9504143	A	19951019	FI 1995-4143	19950904
FI 114006	B1	20040730		
NO 9503461	A	19951106	NO 1995-3461	19950904
NO 314285	B1	20030303		

Patent Number (1)

WO 9420072

Patent Publication Date (1)

19940915

Application Number (1)
WO 1994-SE185
Application Date (1)
19940304
Patent Number (2)
CA 2113795
Patent Publication Date (2)
19950720
Application Number (2)
CA 1994-2113795
Application Date (2)
19940119
Patent Number (3)
AU 9462253
Patent Publication Date (3)
19940926
Application Number (3)
AU 1994-62253
Application Date (3)
19940304
Patent Number (4)
AU 676279
Patent Publication Date (4)
19970306
Patent Number (5)
EP 687172
Patent Publication Date (5)
19951220
Application Number (5)
EP 1994-909393
Application Date (5)
19940304
Patent Number (6)
EP 687172
Patent Publication Date (6)
20021204
Patent Number (7)
JP 08507515
Patent Publication Date (7)
19960813
Application Number (7)
JP 1994-519887
Application Date (7)
19940304
Patent Number (8)
AT 228821
Patent Publication Date (8)
20021215
Application Number (8)
AT 1994-909393
Application Date (8)
19940304

Patent Number (9)
PT 687172
Patent Publication Date (9)
20030430
Application Number (9)
PT 1994-909393
Application Date (9)
19940304
Patent Number (10)
ES 2190439
Patent Publication Date (10)
20030801
Application Number (10)
ES 1994-909393
Application Date (10)
19940304
Patent Number (11)
FI 9504143
Patent Publication Date (11)
19951019
Application Number (11)
FI 1995-4143
Application Date (11)
19950904
Patent Number (12)
FI 114006
Patent Publication Date (12)
20040730
Patent Number (13)
NO 9503461
Patent Publication Date (13)
19951106
Application Number (13)
NO 1995-3461
Application Date (13)
19950904
Patent Number (14)
NO 314285
Patent Publication Date (14)
20030303
Priority Application Information

US 1993-27501	19930305
WO 1994-SE185	19940304

Priority Patent Number (1)
US 1993-27501
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19930305
Priority Patent Number (2)

WO 1994-SE185

Priority Kind Code (2)

W

Priority Patent Publication Date (2)

19940304

Abstract

Suspensions of colloidal solid lipid particles (SLPs) of predominantly anisometrical shape, as well as suspensions or the lyophilizates thereof are prepared and used as delivery systems for the parenteral administration of poorly water-soluble bioactive substances, particularly drugs and vaccines, cosmetics, food and agricultural products. Thus, 0.96 g lecithin and 60 mg lidocaine (I) were dispersed in 4.0 g melted tripalmitate; then 35 mL of heated aqueous phase containing 320 mg Na glycocholate, 0.9 g glycerol and 4 mg thiomersal was added to the melt and sonicated and homogenized to obtain a dispersion of I-loaded SLPs with a mean particle size of 90.4 nm.

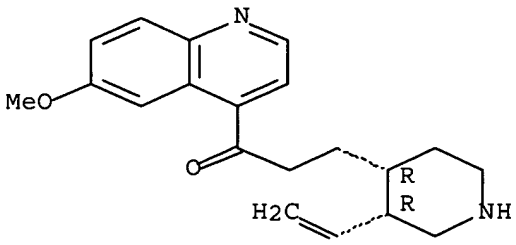
Controlled or Index Terms

84-55-9, Viquidil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suspension of solid lipid particles as carrier for bioactive agents)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 9 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

121:244897 CA Full-text

Title

Qualitative organic analysis. Part 3. Identification of drugs and their metabolites by PCA of standardized TLC data

Author/Inventor

Romano, Guido; Caruso, Giuseppe; Musumarra, Giuseppe; Pavone, Didier; Cruciani, Gabriele

Patent Assignee/Corporate Source

Istituto di Medicina Legale e delle Assicurazioni, Univ. Catania, Catania, 95124, Italy

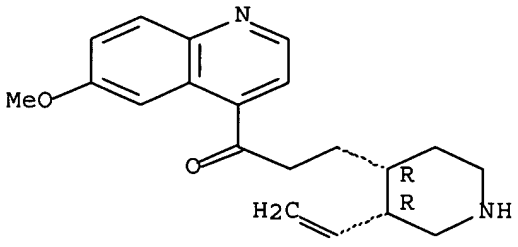
Source

Journal of Planar Chromatography--Modern TLC (1994), 7(3), 233-41 CODEN: JPCTE5; ISSN: 0933-4173

Document Type
Journal
Language
English
Abstract
Principal components anal. (PCA) of standardized RF values of 443 drugs and their metabolites present in urine and blood samples chromatographed with four sheet systems provided a two-component model accounting for 70.8% of the total variance. The "scores" plot enabled either identification, or restriction of the range of inquiry to few candidates. This simple, cheap and fast anal. method is of vital importance in the identification of an unknown drug in cases of overdose intoxication or poisoning.
Controlled or Index Terms
84-55-9, Viquidil
RL: ANT (Analyte); ANST (Analytical study)
(identification of drugs and metabolites in blood and urine by principal components anal. of standardized thin-layer chromatog. data)
Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 10 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
115:50049 CA Full-text
Title
The Cinchona alkaloids: a silicon-directed synthesis of some advanced intermediates
Author/Inventor
Wilson, Stephen R.; Di Grandi, Martin J.
Patent Assignee/Corporate Source
Dep. Chem., New York Univ., New York, NY, 10003, USA
Source
Journal of Organic Chemistry (1991), 56(15), 4766-72 CODEN: JOCEAH; ISSN: 0022-3263
Document Type
Journal

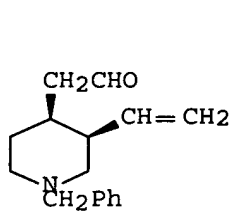
Language

English

Other Source

CASREACT 115:50049

Graphics



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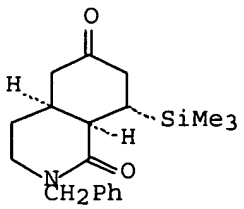

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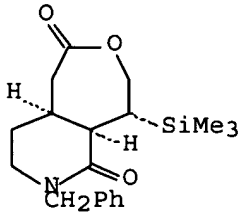

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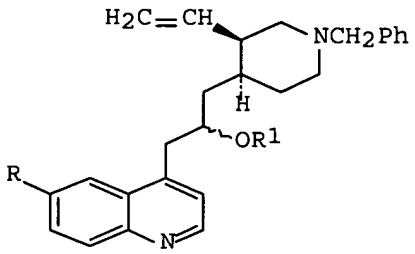


IV

Abstract

N-Benzylmeroquinene aldehyde (I) was prepared in 10 steps and 21% overall yield from benzylamine. The key transformations involved a stereoselective Lewis acid catalyzed Diels-Alder reaction to produce bicyclic amide II, which in turn underwent a regioselective Baeyer-Villager oxidation to produce lactone III. Acid-catalyzed ring opening with concomitant Peterson olefination afforded the meroquinene skeleton which was converted in high yield to meroquinene aldehyde via a reduction/oxidation sequence. Treatment of this aldehyde with anions derived from 4-methylquinoline smoothly generated alcs. IV (R = H, MeO, R1 = H), which on acetylation yielded the advanced Cinchona alkaloid intermediates IV (R1 = Ac). The structure of II was determined by x-ray anal.

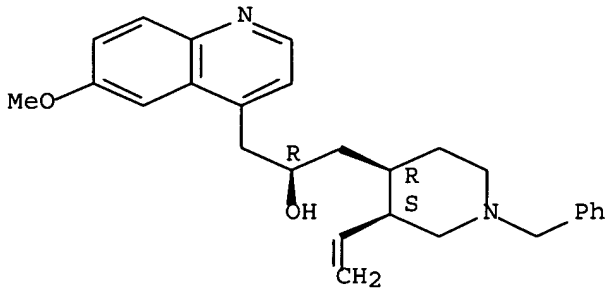
Controlled or Index Terms

134261-57-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

Hit Structure

CAS Registry Number
134261-57-7 CA

Chemical or Trade Name
4-Quinolineethanol, α-[[3-ethenyl-1-(phenylmethyl)-4-piperidinyl]methyl]-6-methoxy-, [3α,4α(S*)]- (9CI) (CA INDEX NAME)



Stereochemistry
Relative stereochemistry.

L12 ANSWER 11 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
114:101680 CA Full-text

Title
The radiosynthesis of NCA [O-methyl-11C]viqualine, through an N-trityl-protected intermediate, as a potential PET radioligand for 5HT re-uptake sites

Author/Inventor
Pascali, Claudio; Pike, Victor W.; Turton, David R.

Patent Assignee/Corporate Source
MRC Cyclotron Unit, Hammersmith Hosp., London, W12 0HS, UK

Source
Journal of Labelled Compounds and Radiopharmaceuticals (1990), 28(11), 1341-50 CODEN: JLCRD4;. ISSN: 0362-4803

Document Type
Journal

Language
English

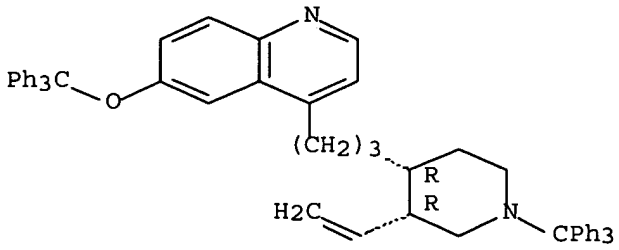
Abstract
Viqualine, has been labeled by protection of piperidine N in demethylviqualine with the trityl group, followed by treatment with 11CH3I in Me2SO with NaOH as base, and then rapid deprotection by mild acid hydrolyis to give [O-methyl-11C]viqualine as the main crude product (27% radiochem. yield, decay-corrected from 11CH3I). The radiosynthesis, including final formulation for i.v. administration, takes 56 min after producing the 11C as 11CO2 by the 14N(p,α)11C reaction. This radiosynthesis illustrates the potential utility of the trityl group for the protection of N in rapid carbon-11 radiochem.

Controlled or Index Terms
132401-16-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
132401-16-2 CA

Chemical or Trade Name
Quinoline, 4-[3-[3-ethenyl-1-(triphenylmethyl)-4-piperidinyl]propyl]-6-(triphenylmethoxy)-, (3R-cis)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 12 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

113:110560 CA Full-text

Title

Thin-layer chromatographic screening of 500 toxicologically relevant substances by corrected Rf values (Rfc values) in two systems

Author/Inventor

Schuetz, H.; Pielmeyer, A.; Weiler, G.

Patent Assignee/Corporate Source

Inst. Rechtsmed., Univ. Giessen, Giessen, D-6300, Germany

Source

Aerztliche Laboratorium (1990), 36(5), 113-23 CODEN: AELAAH; ISSN: 0001-9526

Document Type

Journal

Language

German

Abstract

Rfc values of 499 drugs of forensic relevance for TLC screening are tabulated, for either MeOH or an 85:10:5 mixture of EtOAc-MeOH-25% NA4OH as eluent with either codeine, flurazepam, and papaverine or haloperidol, morphine, and quinine as reference substances.

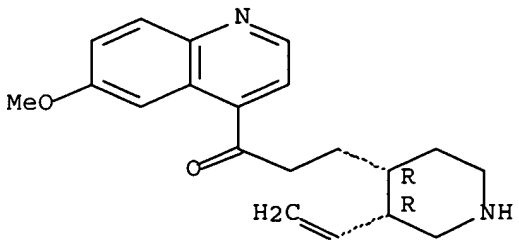
Controlled or Index Terms

84-55-9, Viquidil
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(TLC screening of, corrected Rf values for)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 13 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

111:189388 CA Full-text

Title

Differential effects of viqualine on alcohol intake and other consummatory behaviors

Author/Inventor

Naranjo, Claudio A.; Sullivan, John T.; Kadlec, Karen E.; Woodley-Remus, Denise V.; Kennedy, Gerry; Sellers, Edward M.

Patent Assignee/Corporate Source

Addict. Res. Found., Clin. Inst., Toronto, ON, Can.

Source

Clinical Pharmacology & Therapeutics (St. Louis, MO, United States) (1989), 46(3), 301-9 CODEN: CLPTAT; ISSN: 0009-9236

Document Type

Journal

Language

English

Abstract

Viqualine, a serotonin releaser and uptake inhibitor, was studied for its effects on consummatory behaviors (intake of ethanol and nonalc. beverages, cigarette smoking, and changes in body weight) in 29 men who were early-stage problem drinkers between 21 to 55 yr of age. Subjects were randomly assigned to receive a placebo and either 100 mg/day viqualine or 200 mg/day viqualine orally in a double-blind crossover study. Viqualine administration and ethanol intake were assessed by self-reports and by measurement of drug and ethanol concns. in body fluids. Compared with placebo, 100 mg/day viqualine did not decrease ethanol intake. However, 200 mg/day viqualine significantly decreased the total number of drinks consumed in a 14-day period. An increase in the number of abstinent days was significant only for those subjects who received the placebo first. Subjects reported a decreased interest in and decreased desire for alc. during viqualine treatment. Patterns of response varied, but 64% of the subjects decreased the number of alc. drinks consumed and/or increased the number of days of abstinence by at least 25% during treatment with 200 mg/day viqualine compared with placebo treatment. Neither dose of viqualine had an effect on cigarette smoking or on consumption of nonalc. beverages, but subjects showed significant decreases in body weight with both doses. These findings indicate that viqualine both attenuates ethanol intake and reduces body weight in humans.

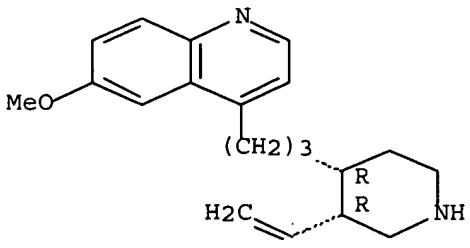
Controlled or Index Terms

72714-74-0, Viqualine
RL: RCT (Reactant); RACT (Reactant or reagent)
(ethanol consumption reduction by, in humans, body weight in relation to)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 14 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

110:109963 CA Full-text

Title

Kinetic and dynamic interactions of oral viqualine and ethanol in man

Author/Inventor

Sullivan, J. T.; Naranjo, C. A.; Shaw, C. A.; Kaplan, H. L.; Kadlec, K. E.; Sellers, E. M.

Patent Assignee/Corporate Source

Clin. Pharmacol. Program, Addict. Res. Found. Clin. Inst., Toronto, ON, M5S 2S1, Can.

Source

European Journal of Clinical Pharmacology (1989), 36(1), 93-6 CODEN: EJCPAS; ISSN: 0031-6970

Document Type

Journal

Language

English

Abstract

The interaction of viqualine, a 5-HT uptake inhibitor with ethanol was studied in 16 healthy men aged 20 to 34 yr. The subjects were randomly assigned to receive ethanol dosed to maintain blood alc. concns. of 17-22 mmol/L or orange juice on each of two test days one week apart and preceded, in random order, by 3 days of viqualine 75 mg bd or placebo. Ethanol had no effect on steady-state viqualine concns. or the inhibition of 5-HT uptake. Viqualine did not affect acetaldehyde concns. of cause an aversive alc.-sensitizing reaction. The deleterious effects of ethanol on word recall, manual tracking, body sway, and self-ratings of intoxication, sedation, and performance were not modified by the presence of viqualine. Within each beverage group performances and self-ratings on viqualine and placebo days were not different. The first dose of viqualine was associated with transient nausea. Viqualine and ethanol do not interact kinetically or dynamically on the variables examined in this study.

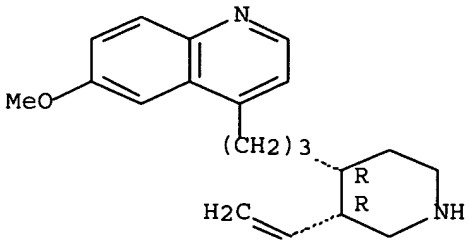
Controlled or Index Terms

72714-74-0, Viqualine
RL: PRP (Properties)
(interaction of, with ethanol in humans, hydroxytryptamine in relation to)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)

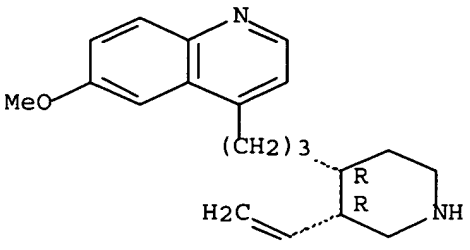


Stereochemistry
Absolute stereochemistry.

L12 ANSWER 15 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
109:222352 CA Full-text
Title
Demonstration of a sodium-magnesium exchange in human red cells by its sensitivity to tricyclic antidepressant drugs
Author/Inventor
Feray, Jean Claude; Garay, Ricardo
Patent Assignee/Corporate Source
Hop. Necker, INSERM, Paris, F-75015, Fr.
Source
Naunyn-Schmiedeberg's Archives of Pharmacology (1988), 338(3), 332-7 CODEN: NSAPCC; ISSN: 0028-1298
Document Type
Journal
Language
English
Abstract
Iminodibenzyl-, iminostilbene-, dibenzocycloheptadiene-, dibenzooxepine-, and dibenzothiepine-derivs. of tricyclic antidepressant drugs were able to inhibit Na+-stimulated Mg2+ efflux in human erythrocytes at 10-5-10-3M. Tricyclic antidepressant drugs belonging to other chemical groups, non-tricyclic antidepressant drugs, and phenothiazines were less potent inhibitors (IC50 ≥ 10-4M). Imipramine and dothiepin, the most potent compds., inhibited the Mg2+ carrier with IC50 of 2.5 and 4 + 10-5M, resp. These IC50 are of similar order of magnitude to those of some classical transport inhibitors such as furosemide for the [Na+,K+,Cl-]-cotransport system. In addition, these concns. of imipramine and dothiepin were free of side effects on other erythrocyte Na+ and K+ transport pathways (with the exception of a slight inhibition of Ca2+-sensitive K+-channels and [Na+,K+,Cl-]- and [K+,Cl-]-cotransport systems) and had no toxic effects on membrane leakage for divalent or monovalent cations. Therefore, imipramine was selected as a tool for investigating fluxes catalyzed by the Na+-stimulated Mg2+ carrier. Imipramine was tested on the initial rate of ouabain- and bumetanide-resistant net Na+ influx in Na+-depleted/Mg2+-loaded erythrocytes. Imipramine inhibited Na+ influx of about 300-500 μmol/h per L of cell volume with an IC50 .simeq. 3 + 10-5M. This imipramine-sensitive Na+ influx was coupled with an imipramine-sensitive Mg2+ efflux with a stoichiometry of 3.03.
Controlled or Index Terms
72714-74-0, Viqualine
RL: BIOL (Biological study)
(sodium-stimulated magnesium efflux in human erythrocyte inhibition by)
Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 16 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

108:161285 CA Full-text

Title

Antidepressants and metabolites that block GABAA receptors coupled to 35S-tert-butylbicyclophosphorothionate binding sites in rat brain

Author/Inventor

Squires, Rrichard F.; Saederup, Else

Patent Assignee/Corporate Source

Nathan Kline Inst. Psychiatr. Res., Orangeburg, NY, 10962, USA

Source

Brain Research (1988), 441(1-2), 15-22 CODEN: BRREAP; ISSN: 0006-8993

Document Type

Journal

Language

English

Abstract

Twenty-three clin. effective antidepressants and some metabolites of antidepressants (together, .apprx.50% of all antidepressants tested) fully or partially reversed the inhibitory action of 1 μM GABA on [35S]tert-butylbicyclophosphorothionate binding by rat brain. GABA antagonism, perhaps at another subset of GABAA receptors, could be also involved in clin. antidepressant action. Selective blockade by excessive GABAergic inhibition of reward systems may contribute to the clin. effects of many antidepressants, in some cases via active metabolites. Previous studies in humans on convulsant side effects of these drugs are discussed.

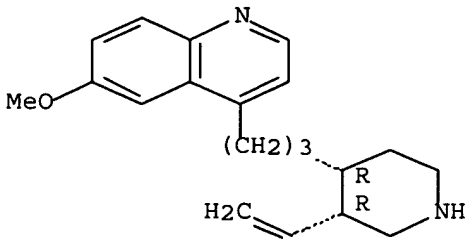
Controlled or Index Terms

72714-74-0, Viqualine
RL: BIOL (Biological study)
(GABA inhibition of butylbicyclophosphorothionate binding by brain reversal by, pharmacol. and side effect in relation to)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 17 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

107:126383 CA Full-text

Title

Qualitative organic analysis. Part 2. Identification of drugs by principal components analysis of standardized TLC data in four eluent systems and of retention indexes on SE 30

Author/Inventor

Musumarra, Giuseppe; Scarlata, Giuseppe; Romano, Guido; Cappello, Giuseppe; Clementi, Sergio; Giulietti, Gianfranco

Patent Assignee/Corporate Source

Dip. Sci. Chim., Univ. Catania, Catania, 95125, Italy

Source

Journal of Analytical Toxicology (1987), 11(4), 154-63 CODEN: JATOD3; ISSN: 0146-4760

Document Type

Journal

Language

English

Abstract

The principal components (PC) anal. of standardized Rf values in 4 eluent systems [ethyl acetate-methanol-30% ammonia (85:10:15), cyclohexane-toluene-diethylamine (65:25:10), Et acetate-chloroform (50:50), and acetone with the plate dipped in KOH solution] and of gas chromatog. retention indexes in SE 30 for 277 compds. provided a 2-PC model that explains 82% of the total variance. The scores plot allowed identification of unknowns or restriction of the range of inquiry to very few candidates. Comparison of these candidates with those selected from another PC model derived from thin-layer chromatog. data only allowed identification of the drug in all the examined cases.

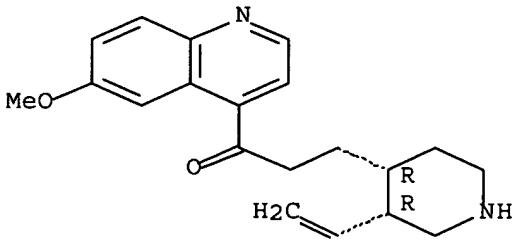
Controlled or Index Terms

84-55-9, Viquidil
RL: PROC (Process)
(identification of, by principal components anal. of Thin layer chromatog. data and gas chromatog. retention)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 18 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

107:32472 CA Full-text

Title

Recovery of normobaric hypoxia-lowered skin conductance response (SCR) in mice: SCR-hypoxia test, an animal model for testing drugs against brain hypoxia

Author/Inventor

Marcy, Rene; Quermonne, Marie Anne; Raoul, Josette; Nammathao, Bounsay

Patent Assignee/Corporate Source

Dep. Pharmacol., Univ. Caen, Caen, 14032, Fr.

Source

Progress in Neuro-Psychopharmacology & Biological Psychiatry (1987), 11(1), 35-43 CODEN: PNPPD7; ISSN: 0278-5846

Document Type

Journal

Language

English

Abstract

A test for the screening of drugs useful for the treatment of brain hypoxia is described. The test is based on the recovery of normobaric hypoxia-induced lowering of the skin conductance response (SCR) in mice. SCR was measured with a skin conductance-meter in response to photostimulation. Fifteen clin. used drugs were tested.

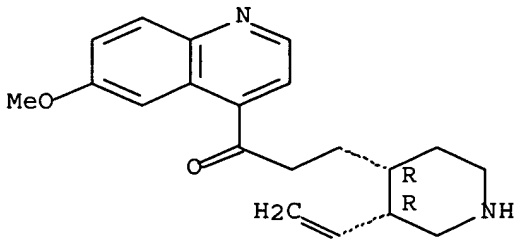
Controlled or Index Terms

84-55-9, Viquidil
RL: BIOL (Biological study)
(antihypoxic activity of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 19 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

106:45574 CA Full-text

Title

Identification and testing of new drugs for modulating alcohol consumption

Author/Inventor

Lawrin, Mary O.; Naranjo, Claudio A.; Sellers, Edward M.

Patent Assignee/Corporate Source

Clin. Pharmacol. Program, Addict. Res. Found., Toronto, ON, M5S 2S1, Can.

Source

Psychopharmacology Bulletin (1986), 22(3), 1020-5 CODEN: PSYBB9; ISSN: 0048-5764

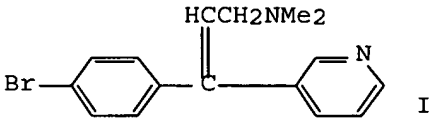
Document Type

Journal

Language

English

Graphics



I

Abstract

Zimelidine (I) [56775-88-3], citalopram [59729-33-8], fluvoxamine [54739-18-3], viqualine [72714-74-0], and MK 212 [64022-27-1] reduced both EtOH [64-17-5] consumption and preference in rats. The ranges of decrease were 18-84% for EtOH consumption and 3-77% for EtOH preference.

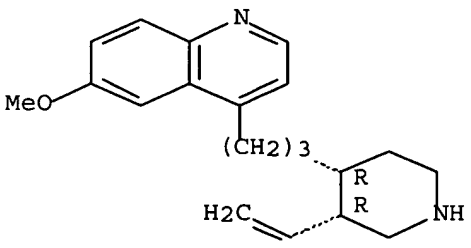
Controlled or Index Terms

72714-74-0, Viqualine
RL: BIOL (Biological study)
(ethanol consumption modulation by)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 20 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

104:95558 CA Full-text

Title

Qualitative organic analysis. I. Identification of drugs by principal components analysis of standardized thin-layer chromatographic data in four eluent systems

Author/Inventor

Musumarra, Giuseppe; Scarlata, Giuseppe; Cirma, Giuseppe; Romano, Guido; Palazzo, Silvana; Clementi, Sergio; Giulietti, Gianfranco

Patent Assignee/Corporate Source

Dip. Sci. Chim., Univ. Catania, Catania, 95125, Italy

Source

Journal of Chromatography (1985), 350(1), 151-68 CODEN: JOCRAM; ISSN: 0021-9673

Document Type

Journal

Language

English

Abstract

Identification of drugs by principal component anal. of standardized retention factor (RF) values in 4 eluent systems, [EtOAc [141-78-6]-MeOH [67-56-1]-30% NH4OH (85:10:15), cyclohexane [110-82-7]-PhMe [108-88-3]-Et2NH [109-89-7] (65:25:10), EtOAc-CHCl3 [67-66-3] (50:50), and Me2CO [67-64-1] with the plate dipped in KOH solution] provided a 2-component model which accounts for 73% of the total variance. The scores plot allowed the restriction of the range of inquiry to a few candidates. This result is of great practical significance in anal. toxicol., especially when account is taken of the cost, the time, the anal. instrumentation and the simplicity of the calcns. required by the method.

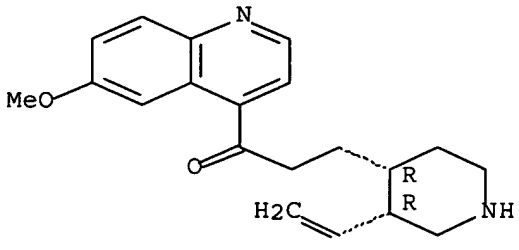
Controlled or Index Terms

84-55-9
RL: ANT (Analyte); ANST (Analytical study)
(identification of, by TLC in 4 eluent systems)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 21 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

103:189114 CA Full-text

Title

Pharmacokinetics and bioavailability of viqualine a new antidepressant

Author/Inventor

Fourtillan, J. B.; Bouquet, S.; Girault, J.; Lefebvre, M. A.; Maulet, C.; Courtois, P.

Patent Assignee/Corporate Source

Inst. Med., U.E.R. Med. Pharm., Poitiers, Fr.

Source

European Journal of Drug Metabolism and Pharmacokinetics (1985), 10(1), 3-10 CODEN: EJDPD2; ISSN: 0398-7639

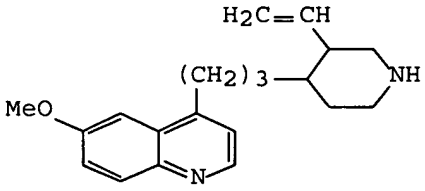
Document Type

Journal

Language

English

Graphics



I

Abstract

A HPLC assay is described for plasma and urine levels measurement of viqualine (I) [72714-74-0]. The assay was used to study the disposition of 25 mg i.v. and oral single doses in 5 healthy subjects. Two exponential terms were required to describe the disposition of the drug after i.v. and oral administration. The bioavailability of oral viqualine averaged 80%. The mean apparent half-life was 12.1 and 11.9 h (mean) after 25 ng i.v. and oral dose resp. The apparent volume of distribution (Vdss) were 1578 L (after i.v. administration) and 1572 L (after oral administration). The body and renal clearances were resp. 1.56 L/h/kg and 1.57 L/h/kg, after 25 mg bolus i.v.

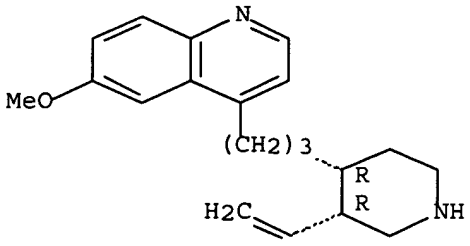
Controlled or Index Terms

72714-74-0
RL: BIOL (Biological study)
(bioavailability and pharmacokinetics of, HPLC determination of plasma and urine levels in relation to, in humans)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI) (CA INDEX NAME)

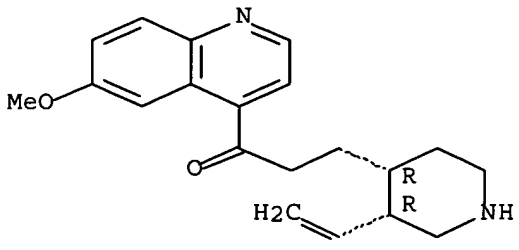


Stereochemistry
Absolute stereochemistry.

L12 ANSWER 22 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
102:39664 CA Full-text
Title
Adrenergic blockers as cerebral antiischemic agents
Author/Inventor
MacKenzie, Eric T.; Gotti, Bernard; Nowicki, Jean Pierre; Young, Alan R.
Patent Assignee/Corporate Source
Cerebral Circulation Metab. Group, LERS-Synthelabo, Bagneux, 92220, Fr.
Source
L.E.R.S. Monograph Series (1984), 2(Neurotransm. Cereb. Circ.), 219-43 CODEN: LMSED6; ISSN: 0742-3896
Document Type
Journal
Language
English
Abstract
The effect of different drugs on cerebral ischemia was determined in the middle cerebral artery occlusion model in cats. It was possible to limit the tissue damage following a major cerebrovascular insult. There was a remarkable correlation between those compds. noted to have a tissue-saving effect in the model of middle cerebral artery occlusion and those compds. that are capable of increasing the respiratory control ratio in isolated mitochondria. Also, limitation of the final necrotic volume of the brain may be based on at least 2 mechanisms: selective vasoconstriction in the perifocal tissues, and the ability to increase the efficacy of mitochondrial respiration. Evidence that the cerebral antiischemic compds. may be α-adrenergic blockers is described.
Controlled or Index Terms
84-55-9
RL: BIOL (Biological study)
(brain mitochondria respiration and cerebral artery response to, ischemia treatment in relation to)
Hit Structure

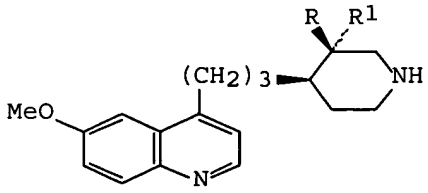
CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 23 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
100:168085 CA Full-text
Title
The 5-hydroxytryptamine-releasing properties of two epimer quinoline derivatives
Author/Inventor
Le Fur, G.; Imbault, F.; Mitrani, N.; Marquis, F.; Renault, C.; Dubroeucq, M. C.; Gueremy, C.; Uzan, A.
Patent Assignee/Corporate Source
Pharmuka Lab., Gennevilliers, 92231, Fr.
Source
Neuropharmacology (1984), 23(2A), 169-73 CODEN: NEPHBW; ISSN: 0028-3908
Document Type
Journal
Language
English
Graphics

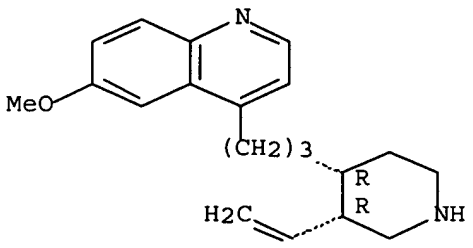


I, R=CH=CH2, R1=H
II, R=H, R1=CH=CH2

Abstract
Two epimer quinoline derivs., PK 5078 (I) [72714-74-0] and PK 7059 (II) [72714-75-1], were potent in releasing 5-hydroxytryptamine (5-HT) [50-67-9] from blood platelets. Moreover, PK 5078 was also a potent and selective inhibitor of the uptake of 5-HT, being .apprx.20 times as active as clomipramine. Both drugs, like p-chloroamphetamine, released 5-HT but did not inhibit MAO-A. While p-chloroamphetamine seemed to be active on the cytoplasmic pool of 5-HT and reserpine on the vesicular pool, PK 5078 and PK 7059 were effective first on the vesicular pool and then on the cytoplasmic pool. The quinoline derivs. were devoid of the typical side-effects of amphetamine-like drugs, i.e. hyperactivity, anorexia, and toxicity. For these reasons PK 5078 and PK 7059 can be considered to be a new type of selective 5 HT-releasing drug.
Controlled or Index Terms
72714-74-0
RL: BIOL (Biological study)
(as serotonin agonist)
Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 24 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

99:133547 CA Full-text

Title

The effect of PK 5078, a new serotonin uptake inhibitor, on serotonin levels and uptake in human platelets, following administration to healthy volunteers

Author/Inventor

Kenny, M.; Lenehan, T. J.; Lambe, R.; Brick, I.; Darragh, A.; Maulet, C.

Patent Assignee/Corporate Source

Inst. Clin. Pharmacol., Dublin, Ire.

Source

European Journal of Clinical Pharmacology (1983), 25(1), 23-8 CODEN: EJCPAS; ISSN: 0031-6970

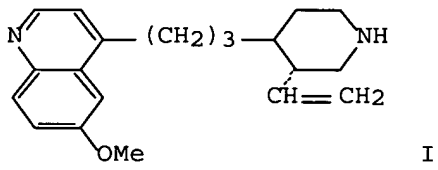
Document Type

Journal

Language

English

Graphics



I

Abstract

PK 5078 (I) [72714-74-0] was administered to healthy male volunteers in single and multiple oral doses and the effects on platelet serotonin [50-67-9] uptake and content were examined A significant dose-related inhibition of 3H labeled serotonin uptake by platelets was observed following single oral doses of PK 5078 (25 - 150 mg), with maximal inhibition at 75 mg. This was evident 2 h after dosing and was still marked after 10 h. Plasma collected from the subjects after dosing also had a considerable dose-related effect on the uptake of[3H]serotonin by untreated platelets. No significant alteration in platelet serotonin content was observed after single dose-related effect on the uptake of [3H]-serotonin by untreated platelets. No significant alteration in platelet serotonin content was observed after single doses of PK 5078. When PK 5078 (50 mg) was administered twice daily for 9 days, there was a rapid and sustained reduction in [3H]-serotonin uptake by platelets, which returned to pretreatment levels 2 days after discontinuation of the drug. A similar response was observed when plasma from these subjects was incubated with untreated platelets. The rate of depletion of endogenous platelet serotonin was much slower with min. levels being attained on the morning after the final dose. The recovery following withdrawal was also slow with serotonin levels approaching pre-dose values 14 days after the final dose of PK 5078.

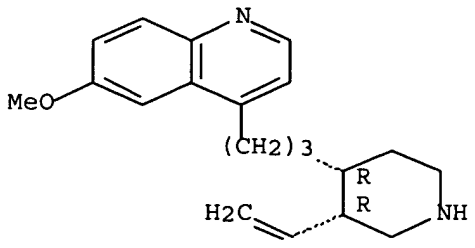
Controlled or Index Terms

72714-74-0
RL: BIOL (Biological study)
(serotonin uptake by blood platelets of humans inhibition by)

Hit Structure

CAS Registry Number
72714-74-0 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethenyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)

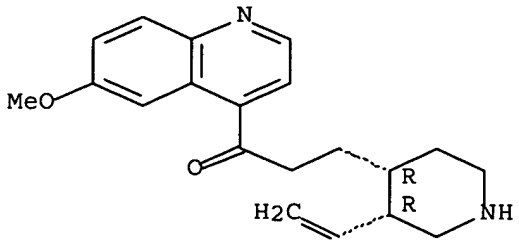


Stereochemistry
Absolute stereochemistry.

L12 ANSWER 25 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
99:288 CA Full-text
Title
Focal cerebral ischemia: new concepts in its pathogenesis and pharmacotherapy
Author/Inventor
Gotti, B.; MacKenzie, E. T.; Nowicki, J. P.; Young, A. R.
Patent Assignee/Corporate Source
Cerebral Circulation Metabolism Group, LERS-Synthelabo, Bagneux, 92220, Fr.
Source
Janssen Research Foundation Series (1982), 7(Prot. Tissues Hypoxia), 247-62 CODEN: JRFSDU; ISSN: 0165-8352
Document Type
Journal
Language
English
Abstract
A focal cerebrovascular insult does not lead to an instantaneous and irreversible infarction of a predetd. volume of cerebral tissue. The penumbra which surrounds the infarct, although functionally inactive, is structurally healthy tissue. Also there is selective- or partial neuronal death distant from the infarct area. Following an ischemic insult, cell death is a gradual and progessive process, rather than an instantaneous event. In light of these findings, therapy of cerebral ischemia with drugs should follow several days after this ischemic insult, not just a few hours. Drug therapy may spare cortical neurons by free radical scavenging or prevent ischemia induced changes in vascular tissue. Comparative studies showed that significant limitation of the final necrotic volume of the brain can be based on at least 2 mechanisms; selective vasoconstriction in the perifocal tissues, and the ability to increase the efficacy of mitochondrial respiration.
Controlled or Index Terms
84-55-9
RL: BIOL (Biological study)
(in protection against brain ischemia)
Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



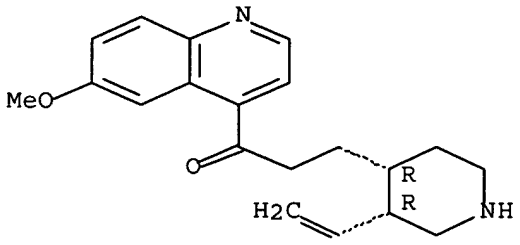
Stereochemistry
Absolute stereochemistry.

L12 ANSWER 26 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
96:193137 CA Full-text
Title
Effects of agents used in the pharmacotherapy of cerebrovascular disease on the oxygen consumption of isolated cerebral mitochondria
Author/Inventor
Nowicki, Jean Pierre; MacKenzie, Eric T.; Spinnewyn, Brigitte
Patent Assignee/Corporate Source
Dep. Biol., Lab. Etudes Rech. Synthelabo, Bagneux, Fr.
Source
Journal of Cerebral Blood Flow and Metabolism (1982), 2(1), 33-40 CODEN: JCBMDN; ISSN: 0271-678X
Document Type
Journal
Language
English
Abstract
A number of drugs used in the pharmacotherapy of cerebral metabolic vascular disease were studied for their effects on the respiration of mitochondria isolated from the rat brain. Some of these agents increased the respiratory control ratio by >5% from base-line values, namely, aminophylline [317-34-0], dihydroergotoxine mesylate [8067-24-1], ifenprodil tartrate [23210-58-4], nicergoline tartrate [32222-75-6], raubasine [483-04-5], and vincamine mesylate [79238-35-0]. The ability of these agents to increase the efficiency of mitochondrial respiration could be correlated with 2 other attributes peculiar to these 5 drugs: their ability to contract cerebrovascular smooth muscle when studied in vitro and their ability to decrease the volume of infarcted brain tissue following exptl. occlusion of the middle cerebral artery in the cat. int papaverine [58-74-2] and its derivs. (naftidrofuryl [31329-57-4], viquidil [84-55-9], YC-93 [54527-84-3]) decreased respiratory control, an effect that might correlate with their capacity to effect a vasodilation of the cerebral vessels and their inefficacy in models of acute cerebral infarction. Much evidence suggests that one of the earliest and most fundamental perturbations of cerebral ischemia is a loss of respiratory control. Ifenprodil, vincamine, and some related antiischemic compds. are capable of increasing respiratory control in normal cerebral mitochondria, and this capacity might well help to explain their therapeutic potential in cerebrovascular disorders in which energy supply to the brain is limited.
Controlled or Index Terms
84-55-9
RL: BIOL (Biological study)
(respiration of brain mitochondria response to, cerebrovascular disease treatment in relation to)
Hit Structure

CAS Registry Number

84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 27 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
96:162553 CA Full-text
Title
1-(2-,3- Or 4-quinolyl), 2- or 3- (2- or 3- piperidyl or pyrrolidinyl) ethanone or propanone and their use as medicaments
Author/Inventor
Dubroeucq, Marie Christine; Gueremy, Claude Georges Alexandre; Le Fur, Gerard Roger; Mizoule, Jacques
Patent Assignee/Corporate Source
(Pharmindustrie), Fr.
Source
Eur. Pat. Appl., 47 pp. CODEN: EPXXDW
Document Type
Patent
Language
French
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 42781	A1	19811230	EP 1981-400934	19810612
EP 42781	B1	19850306		
FR 2485014	A1	19811224	FR 1980-13698	19800620
FR 2485014	B1	19840504		
US 4402961	A	19830906	US 1981-271877	19810609

ES 503166	A1	19821101	ES 1981-503166	19810617
CA 1184180	A1	19850319	CA 1981-380003	19810617
ZA 8104126	A	19820630	ZA 1981-4126	19810618
DK 8102719	A	19811221	DK 1981-2719	19810619
NO 8102105	A	19811221	NO 1981-2105	19810619
AU 8171983	A1	19811224	AU 1981-71983	19810619
AU 537379	B2	19840621		
JP 57102885	A2	19820626	JP 1981-95167	19810619
HU 27183	O	19831028	HU 1981-1817	19810619
AT 377517	B	19850325	AT 1981-2752	19810622
AT 8102752	A	19840815		
ES 513448	A1	19830401	ES 1982-513448	19820625
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AT 377518	B	19850325	AT 1984-377	19840206
AT 377519	B	19850325	AT 1984-378	19840206

Patent Number (1)
EP 42781
Patent Publication Date (1)
19811230
Application Number (1)
EP 1981-400934
Application Date (1)
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Patent Number (2)
EP 42781
Patent Publication Date (2)
19850306
Patent Number (3)
FR 2485014
Patent Publication Date (3)
19811224
Application Number (3)
FR 1980-13698
Application Date (3)
19800620
Patent Number (4)
FR 2485014
Patent Publication Date (4)

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Patent Publication Date (5)
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Patent Publication Date (10)
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Application Number (10)
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Application Date (10)
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Patent Publication Date (11)

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Application Number (13)
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Patent Publication Date (14)
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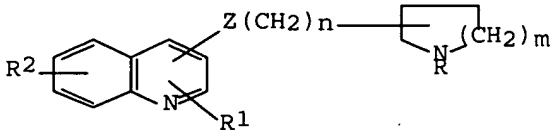
Patent Publication Date (20)
19850325
Application Number (20)
AT 1984-378
Application Date (20)
19840206
Priority Application Information

FR 1980-13698	19800620
AT 1981-2752	19810622

Priority Patent Number (1)
FR 1980-13698
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19800620
Priority Patent Number (2)
AT 1981-2752
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
19810622
Other Source
CASREACT 96:162553; MARPAT 96:162553
Graphics



I

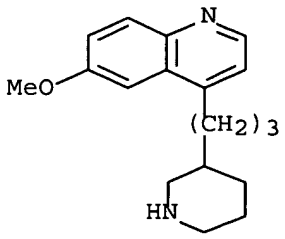
Abstract
Quinolines I [Z = CO, CH(OH), CH2; n = 1,2; m = 1, 2; R = H, alkyl, alkenyl, arylalkyl; R1 = H, alkyl, Ph, pyridyl, thienyl, halo-, alkyl-, alkoxy-, or (alkylthio)-, or (trifluoromethyl)phenyl; R2 = H, halo, alkyl, alkoxy, alkylthio, CF3] were prepared and they exhibited tranquilizer and antiarrhythmic activity. Et 4-quinolinecarboxylate was treated with Et 3-(1-benzoyl-3-piperidyl)propionate and KH to give 4-[3-(3-piperidyl) propionyl]quinoline.
Controlled or Index Terms
81290-59-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and pharmacol. activity of)

Hit Structure

CAS Registry Number
81290-59-7 CA

Chemical or Trade Name
Quinoline, 6-methoxy-4-[3-(3-piperidinyl)propyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 28 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
96:149193 CA Full-text

Title
Pharmaceutical compositions containing quinoline derivatives

Author/Inventor
Champseix, Alain; Gueremy, Claude; LeFur, Gerard

Patent Assignee/Corporate Source
MARPHA Societe d'Etudes et d'Exploitation de Marques S. A., Fr.

Source
Can., 17 pp. Division of Can. Appl. No. 280,812. CODEN: CAXXA4

Document Type
Patent

Language
French

Family Accession Number Count
6

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1116089	A2	19820112	CA 1980-362714	19801017
FR 2354771	A1	19780113	FR 1976-18555	19760618
FR 2354771	B1	19820108		
CA 1106379	A1	19810804	CA 1977-280812	19770617

Patent Number (1)
CA 1116089
Patent Publication Date (1)
19820112
Application Number (1)
CA 1980-362714
Application Date (1)
19801017
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Patent Publication Date (2)
19780113
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FR 1976-18555
Application Date (2)
19760618
Patent Number (3)
FR 2354771
Patent Publication Date (3)
19820108
Patent Number (4)
CA 1106379
Patent Publication Date (4)

19810804
Application Number (4)
CA 1977-280812
Application Date (4)
19770617
Priority Application Information

FR 1976-18555	19760618
CA 1977-280812	19770617

Priority Patent Number (1)
FR 1976-18555
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
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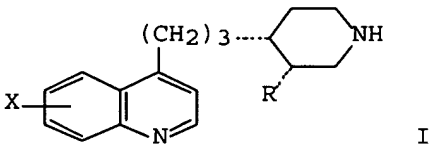
Priority Patent Number (2)
CA 1977-280812
Priority Kind Code (2)
A3
Priority Patent Publication Date (2)
19770617
Graphics

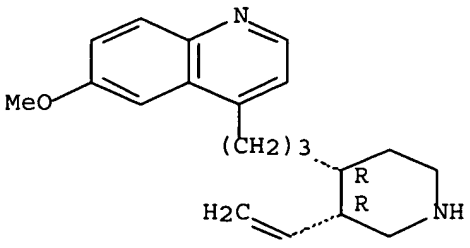


I

Abstract
Quinoline derivs. I (R or X = H, vinyl, OMe) were prepared as antidepressants and antiarrhythmics. Thus, to a suspension of 48 g quinicine [84-55-9] in 200 mL diethylene glycol and 23 g 85% hydrazine hydrate, 18 g NaOH pellets were added, and the mixture was heated at 110-50°. The oil, isolated from the organic phase, was treated in iso-PrOH with HCl to give (R)-4-[3-(6-methoxy-4- quinolyl)-1-propyl]-(R)-3-vinylpiperidine-2HCl (II) [65843-79-0]. II was reduced with Pd/C/H to give (R)-4-[3-(6-methoxy-4-quinolyl)-1- propyl]-3(R)-ethylpiperidine-2HCl (III) [65843-80-3]. II and III were effective inhibitors of serotonin recapture and effective potentiators of 5-HTP. The antiarrhythmic and antidepressant activities of I were demonstrated.
Controlled or Index Terms
65843-79-0P
RL: PREP (Preparation)
(preparation of, as antiarrhythmic and antidepressant)
Hit Structure

CAS Registry Number
65843-79-0 CA

Chemical or Trade Name
Quinoline, 4-[3-(3-ethenyl-4-piperidinyl)propyl]-6-methoxy-, dihydrochloride, (3R-cis)- (9CI) (CA INDEX NAME)



●2 HCl

Stereochemistry
Absolute stereochemistry.

L12 ANSWER 29 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
96:123074 CA Full-text
Title
Quinoline derivatives, their use, pharmaceutical compositions containing them and a method for the preparation of these pharmaceutical compositions
Author/Inventor
Trijzelaar, Hans; De Bode, Ronus; Welle, Hendricus Bernardus Anto
Patent Assignee/Corporate Source
ACF Chemiefarma N. V., Neth.
Source
Eur. Pat. Appl., 59 pp. CODEN: EPXXDW
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 30044	A1	19810610	EP 1980-201009	19801024
NL 7908031	A	19810601	NL 1979-8031	19791101
DK 8004452	A	19810502	DK 1980-4452	19801021
AU 538841	B2	19840830	AU 1980-63609	19801022
AU 8063609	A1	19810507		
US 4472403	A	19840918	US 1980-201577	19801028
ZA 8006682	A	19811028	ZA 1980-6682	19801030

JP 56090085	A2	19810721	JP 1980-152366	19801031
ES 496901	A1	19820501	ES 1980-496901	19801031
ES 508617	A1	19821101	ES 1981-508617	19811216
ES 508618	A1	19830301	ES 1981-508618	19811216

Patent Number (1)
EP 30044
Patent Publication Date (1)
19810610
Application Number (1)
EP 1980-201009
Application Date (1)
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Patent Number (2)
NL 7908031
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US 1980-201577
Application Date (6)
19801028

Patent Number (7)
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Patent Publication Date (9)
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Patent Publication Date (10)
19821101
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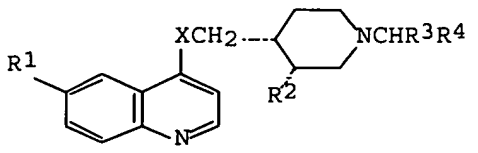
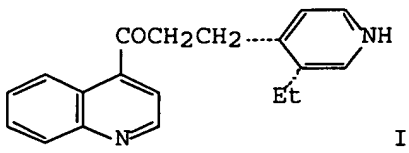
ES 1981-508617
Application Date (10)
19811216
Patent Number (11)
ES 508618
Patent Publication Date (11)
19830301
Application Number (11)
ES 1981-508618
Application Date (11)
19811216
Priority Application Information

NL 1979-8031	19791101

Priority Patent Number (1)
NL 1979-8031
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19791101
Other Source
MARPAT 96:123074
Graphics



I



II

Abstract

The cardiovascular active cinchonicine derivs. I [R1 = H, HO, alkoxy, R2 = Et, H2C:CH; R3 = C2-8 alkyl, C1-8 hydroxyalkyl, alkoxyalkyl, alkanoyloxyalkyl, (un)substituted cycloalkyl, (un)substituted cycloalkylalkyl, cyano, cyanoalkyl, alkenyl, alkynyl, tetrahydrofuryl, alkylamino, dialkylamino, hydroxyalkyl, (un)substituted Ph, (un)substituted phenylalkyl, heteroarylalkyl (un)substituted phenylalkenyl, (un)substituted benzoyl, (un) substituted phenylalkenyl, (un)substituted benzoyl, (un)substituted benzoylalkyl; R4 = alkyl; R3R4 = alkylene; X = CH2CH2, CH(OH)CH2, CH2CH(OH), COCH2, CH2CO, C(NOR5)CH2, CH2C(NOR5) (R5 = alkyl)] were prepared Thus, hydrocinchonicine (II) was treated with Cl(CH2)3COPh to give I [R1 = R4 = H, R2 = Et, R3 = PhCO(CH2)3, X = COCH2]. Antihypertensive and antiarrhythmic activity were tabulated for about 30 I.

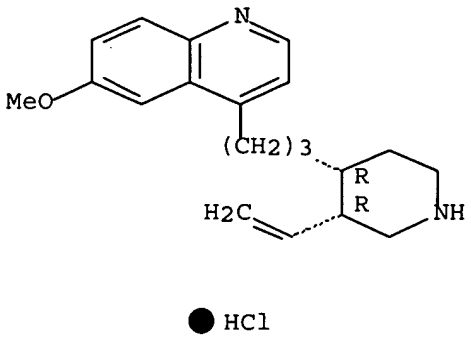
Controlled or Index Terms

79626-11-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, by cyclobutanecarboxylic acid)

Hit Structure

CAS Registry Number
79626-11-2 CA

Chemical or Trade Name
Quinoline, 4-[3-(3-ethenyl-4-piperidinyl)propyl]-6-methoxy-, monohydrochloride, (3R-cis)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 30 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

96:69277 CA Full-text

Title

Quinoline derivatives and pharmaceutical compositions containing such compounds

Author/Inventor

Trijzelaar, Hans Barend; De Bode, Ronus; Welle, Hendricus Bernardus Anto

Patent Assignee/Corporate Source

ACF Chemiefarma N. V., Neth.

Source

Eur. Pat. Appl., 30 pp. CODEN: EPXXDW

Document Type

Patent

Language

English

Family Accession Number Count

3

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 35821	A1	19810916	EP 1981-200259	19810305
NL 8001369	A	19811001	NL 1980-1369	19800306
NL 8004003	A	19820201	NL 1980-4003	19800711
AU 8168108	A1	19810910	AU 1981-68108	19810305
JP 56139480	A2	19811030	JP 1981-30627	19810305
JP 56139481	A2	19811030	JP 1981-30628	19810305
US 4442107	A	19840410	US 1981-240818	19810305

Patent Number (1)

EP 35821

Patent Publication Date (1)

19810916

Application Number (1)

EP 1981-200259

Application Date (1)

19810305

Patent Number (2)

NL 8001369

Patent Publication Date (2)

19811001

Application Number (2)

NL 1980-1369

Application Date (2)

19800306

Patent Number (3)

NL 8004003

Patent Publication Date (3)

19820201

Application Number (3)

NL 1980-4003

Application Date (3)

19800711

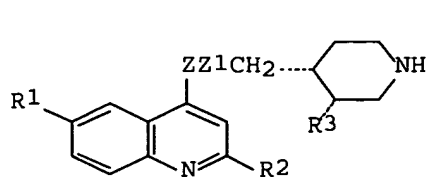
Patent Number (4)

AU 8168108

Patent Publication Date (4)
19810910
Application Number (4)
AU 1981-68108
Application Date (4)
19810305
Patent Number (5)
JP 56139480
Patent Publication Date (5)
19811030
Application Number (5)
JP 1981-30627
Application Date (5)
19810305
Patent Number (6)
JP 56139481
Patent Publication Date (6)
19811030
Application Number (6)
JP 1981-30628
Application Date (6)
19810305
Patent Number (7)
US 4442107
Patent Publication Date (7)
19840410
Application Number (7)
US 1981-240818
Application Date (7)
19810305
Priority Application Information

NL 1980-1369	19800306
NL 1980-4003	19800711

Priority Patent Number (1)
NL 1980-1369
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19800306
Priority Patent Number (2)
NL 1980-4003
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
19800711
Other Source
MARPAT 96:69277
Graphics



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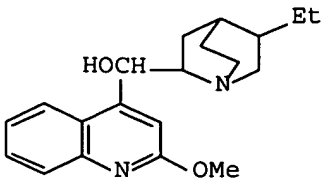


II

Abstract

Quinoline derivs. I [R1 = H, OH, alkoxy; R2 = OH, alkoxy, CF3; R3 = Et, CH:CH2; ZZ1 = CH2CH2, CH(OH) CH2, CH2CH(OH), COCH2, CH2CO, C(:NOR4)CH2 (R4 = alkyl), CH2C(:NOR4)], useful as antihypertensives and antiarrhythmics, were prepared Treating 2'-methoxyhydrocinchonidine (II) in EtOH with PhCH2Br gave the quaternary salt which was cleaved with refluxing aqueous alc. KOH to give N-benzyl-2'-methoxyhydrocinchonicine 1,2-epoxide. Reductive cleavage of the oxirane (H2, Pd/coal) gave hydrocinchonicin-2-ol I [R1 = H, R2 = OMe, ZZ1 = CH2CH(OH)]. At 10 mg/kg (rats), I (R1 = H, R2 = OH, ZZ1 = CH2CH2) decreased systolic blood pressure 10, 11, 12, and 6% at 1, 2, 4, and 6 h and at 32 mg/kg (guinea pigs) increased the voltage required for arrhythmia by 94%.

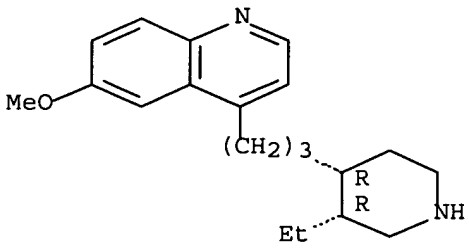
Controlled or Index Terms

75920-35-3
RL: PROC (Process)
(conversion of, to hydroxydeoxohydroquinicine)

Hit Structure

CAS Registry Number
75920-35-3 CA

Chemical or Trade Name
Quinoline, 4-[3-[(3R,4R)-3-ethyl-4-piperidinyl]propyl]-6-methoxy- (9CI)
(CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 31 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

96:15159 CA Full-text

Title

Experimental cerebral hemodynamic, metabolic and antihypoxic properties of 5 drugs used in cerebrovascular therapy

Author/Inventor

Linee, P.; Lacroix, P.; Le Polles, J. B.; Van den Driessche, J.

Patent Assignee/Corporate Source

Lab. Sobio, CRES, Saint-Gregoire, 35760, Fr.

Source

Pathophysiol. Pharmacother. Cerebrovasc. Disord., Satell. Symp., 2nd (1980), 138-41. Editor(s): Betz, E.; Grote, J.; Heuser, D. Witzstrock: Baden-Baden, Fed. Rep. Ger. CODEN: 46SXAH

Document Type

Conference

Language

English

Abstract

The metabolic and antihypoxic effects of dihydroergotoxine [11032-41-0], 1-eburnamonine [474-00-0], papaverine [58-74-2], quinicine [84-55-9], and vincamine [1617-90-9] were studied in exptl. models of organic brain syndrome. In anesthetized dogs, the effects of the drugs on cerebral hemodynamics and metabolism were determined In curarized rats, the effects of the drugs on acute and iterative asphyxia were evaluated.

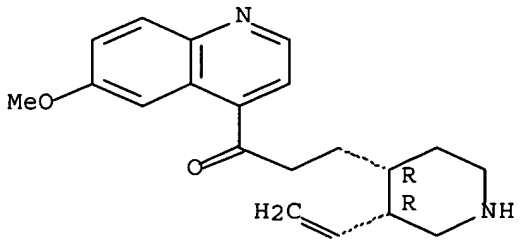
Controlled or Index Terms

84-55-9
RL: BIOL (Biological study)
(brain hypoxia and metabolism response to)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 32 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

95:187095 CA Full-text

Title

Quinoline derivatives and pharmaceutical preparations containing them

Patent Assignee/Corporate Source

ACF Chemiefarma N. V., Neth.

Source

Neth. Appl., 25 pp. CODEN: NAXXAN

Document Type

Patent

Language

Dutch

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 7908030	A	19810601	NL 1979-8030	19791101

Patent Number (1)

NL 7908030

Patent Publication Date (1)

19810601

Application Number (1)

NL 1979-8030

Application Date (1)

19791101

Priority Application Information

NL 1979-8030	19791101

Priority Patent Number (1)

NL 1979-8030

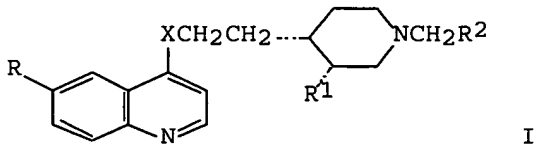
Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19791101

Graphics



I

Abstract

Quinolines I (X = CH2, CHOH, CO; R = H, OH, alkoxy; R1 = Et, CH:CH2; R2 = optionally substituted alkyl, Ph, heteroaryl) were prepared Thus hydrocinchonicine was treated with Cl(CH2)3COPh to give I (X = CO, R = H, R1 = Et, R2 = CH2CH2COPh) which was converted to its fumarate (II). At 100 mg/kg II caused a decrease in blood pressure of 27% in spontaneously hypertensive rats. At 32 mg/kg orally in guinea pigs II increased the voltage required to induce arrhythmia by 46%.

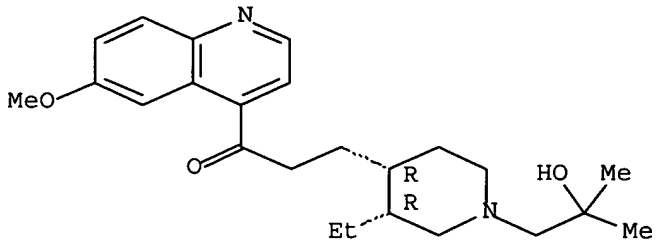
Controlled or Index Terms

79626-64-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of)

Hit Structure

CAS Registry Number
79626-64-5 CA

Chemical or Trade Name
1-Propanone, 3-[3-ethyl-1-(2-hydroxy-2-methylpropyl)-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, (3R-cis)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 33 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

95:175871 CA Full-text

Title

Microchemical reactions of drugs with a basic nitrogen atom. Part II. Tranylcypromine sulfate and viquidil hydrochloride

Author/Inventor

Yalcindag, O. N.

Patent Assignee/Corporate Source

Refik-Saydam-Cent. Inst. Hyg., Ankara, Turk.

Source

Scientia Pharmaceutica (1981), 49(2), 197-200 CODEN: SCPHA4; ISSN: 0036-8709

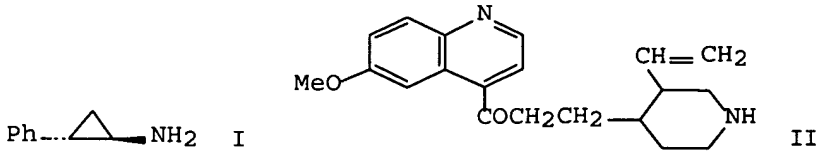
Document Type

Journal

Language

German

Graphics



Abstract

Tranylcypromine sulfate (I sulfate) [13492-01-8] can be identified by the crystal ppts. formed with 5-nitrobarbituric acid [480-68-2], Reinecke's salt [13573-16-5], chloroplatinic acid [16941-12-1], bromoplatinate [20596-34-3] (H_2PtCl_6 + NaBr), and iodoplatinate [7487-94-7] (H_2PtCl_6 + NaI). Viquidil-HCl (II-HCl) [52211-63-9] can be identified by the crystal ppts., formed with 5-nitrobarbituric acid and HgCl.

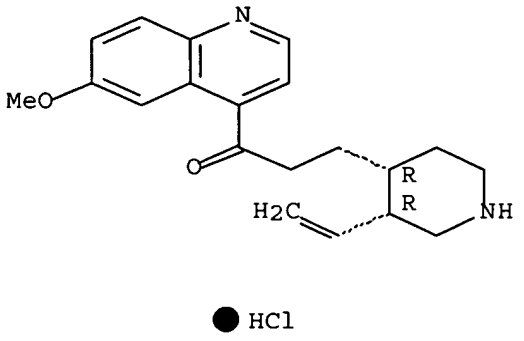
Controlled or Index Terms

52211-63-9
RL: PROC (Process)
(identification of, by microchem. reactions)

Hit Structure

CAS Registry Number
52211-63-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 34 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

95:161806 CA Full-text

Title

Direct vascular effects of agents used in the pharmacotherapy of cerebrovascular disease on isolated cerebral vessels

Author/Inventor

Young, Alan R.; Bouloy, Michele; Boussard, Jean Francois; Edvinsson, Lars; MacKenzie, Eric T.

Patent Assignee/Corporate Source

Dep. Biol., Synthelabo, Bagneux, Fr.

Source

Journal of Cerebral Blood Flow and Metabolism (1981), 1(1), 117-28 CODEN: JCBMDN; ISSN: 0271-678X

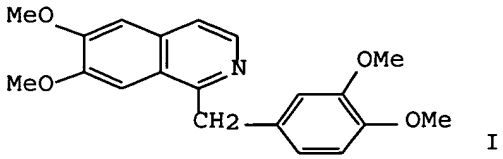
Document Type

Journal

Language

English

Graphics



I

Abstract

The direct vasomotor effects of a number of agents used in the therapy of cerebral circulatory and metabolic diseases were studied in isolated segments of cat pial vessels in vitro. Studies were repeated to calculate the mean maximum response-termed EAm (in dynes)-and the molar agonist concentration required to effect the half-maximal response, termed EC50. The results obtained with various agonists were compared to a well-documented vasodilator, acetylcholine (EAm = -780 dynes; EC50 = 0.029 μM) and a known vasoconstrictor, 5-hydroxytryptamine (EAm = + 1630 dynes; EC50 = 0.036 μM). Papaverine-HCl (I-HCl) [61-25-6] and its derivs. effected a relaxation of the pial arteries with the following order of potency: YC-93 [54527-84-3] > I > naftidrofuryl oxalate [3200-06-4] > viquidil-HCl [52211-63-9]. The EC50 for I was 1.5 μ M. Me xanthine derivs. (aminophylline [317-34-0], pentoxifylline [6493-05-6], and theophylline [58-55-9]) were essentially inactive. In contrast, drugs that are known to be capable of decreasing the volume of an exptl. infarction, many of which are described as α-adrenolytic agents, contracted the isolated cerebrovascular smooth muscle. Their order of efficacy, based on the mean EAm values, was ifenprodil tartrate [23210-58-4] > vincamine mesylate [79238-35-0] > nicergoline tartrate [32222-75-6] > dihydroergotoxine mesylate [8067-24-1] > raubasine-HCl [4373-34-6]. In addition, it was considered worthwhile to determine whether the ifenprodil-induced vasoconstriction occurred when human, rather than cat, pial vessels were studied. Ifenprodil and vincamine contracted human vessels in a biphasic manner; the EC50 values were calculated to be 2.0 and 30 μM, resp. Based on the above observations, the following comments would appear justified. Firstly, an increase in cerebral blood flow does not necessarily mean a compound is a direct vasodilator. Secondly, the vasoconstrictor actions of some agents correlate well with their anti-ischemic properties (e.g., ifenprodil, vincamine, and nicergoline). Lastly, one action of effective anti-ischemic agents might be to reduce flow, by vasoconstriction, in hyperemic tissue: the inverse "steal" effect.

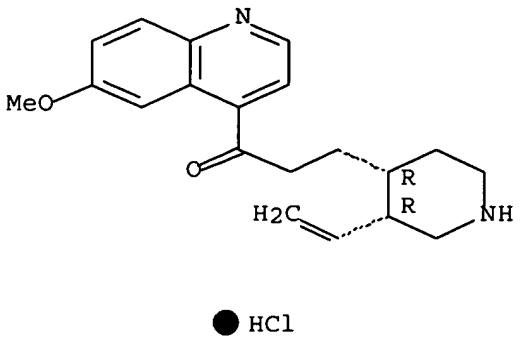
Controlled or Index Terms

52211-63-9
RL: BIOL (Biological study)
(circulation of brain response to, cerebrovascular disease in relation to)

Hit Structure

CAS Registry Number
52211-63-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 35 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
92:147017 CA Full-text
Title
Quininone
Author/Inventor
Gignier, Jean P.; Bourrelly, Jacques
Patent Assignee/Corporate Source
Fr.
Source
U.S., 4 pp. CODEN: USXXAM
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4175192	A	19791120	US 1978-915009	19780613

Patent Number (1)
US 4175192
Patent Publication Date (1)
19791120
Application Number (1)
US 1978-915009
Application Date (1)
19780613
Priority Application Information

US 1978-915009	19780613

Priority Patent Number (1)
US 1978-915009
Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19780613

Abstract

Cinchona alkaloids were oxidized to the corresponding ketone by reacting the alkaloid with a metal ketal in an inert hydrocarbon solvent. Thus, fluorenone was treated with Na in anhydrous toluene and the solution added to a mixture of epiquinine 35, eipquinidine 24, quinine 7, quinidine 3, quininone 2, quinotoxine 2, epicinchonine and quininone 2, quinotoxine 2, epicinchonine and epicinchonidine 12, and various other alkaloids 15% to give a mixture of 39 g quininone, 1 g quinidinone and 16 g of cinchoninone/cinchonidinone.

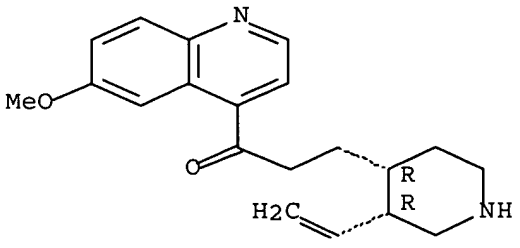
Controlled or Index Terms

84-55-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(modified Oppenauer oxidation of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 36 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

92:42213 CA Full-text

Title

Quininone and quinidinone, intermediates in quinidine synthesis

Patent Assignee/Corporate Source

Devinter S. A., Luxembourg

Source

Fr. Demande, 10 pp. CODEN: FRXXBL

Document Type

Patent

Language

French

Family Accession Number Count

2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2394545	A1	19790112	FR 1977-18398	19770615
EP 9	A1	19781220	EP 1978-400019	19780614
EP 9	B1	19800723		
EP 302	A1	19790110	EP 1978-400020	19780614
EP 302	B1	19801001		

Patent Number (1)

FR 2394545

Patent Publication Date (1)

19790112

Application Number (1)

FR 1977-18398

Application Date (1)

19770615

Patent Number (2)

EP 9

Patent Publication Date (2)

19781220

Application Number (2)

EP 1978-400019

Application Date (2)

19780614

Patent Number (3)

EP 9

Patent Publication Date (3)

19800723

Patent Number (4)

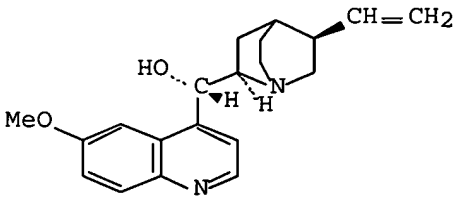
EP 302

Patent Publication Date (4)

19790110
Application Number (4)
EP 1978-400020
Application Date (4)
19780614
Patent Number (5)
EP 302
Patent Publication Date (5)
19801001
Priority Application Information

FR 1977-18397	19770615
FR 1977-18398	19770615

Priority Patent Number (1)
FR 1977-18397
Priority Patent Publication Date (1)
19770615
Priority Patent Number (2)
FR 1977-18398
Priority Patent Publication Date (2)
19770615
Graphics



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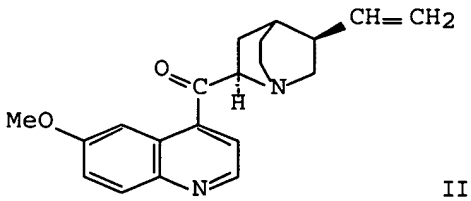
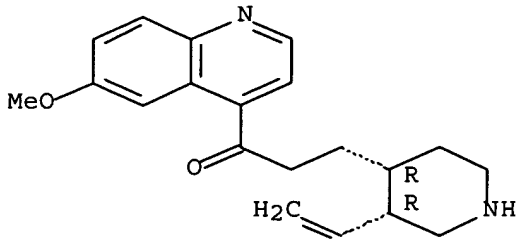


II

Abstract
Quininone and quinidinone, intermediates in synthesis of quinidine, were prepared by an Oppenauer type oxidation Thus, 9 g anhydrous fluorenone was treated with Na and the resulting ketyl treated with 37 g quinidine (I) to give 36 g quinidinone (II) (97%).
Controlled or Index Terms
72402-54-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
Hit Structure

CAS Registry Number
72402-54-1 CA

Chemical or Trade Name
1-Propanone, 3-(3-ethenyl-4-piperidinyl)-1-(6-methoxy-4-quinolinyl)-, cis-
(9CI) (CA INDEX NAME)



Stereochemistry

Relative stereochemistry.

L12 ANSWER 37 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

90:81024 CA Full-text

Title

Comparative study of the antiarrhythmic properties of two isomers, quinidine and quinicine

Author/Inventor

Pecquet-Bathellier, Colette; Quevauviller, A.

Patent Assignee/Corporate Source

Serv. Hyg. Educ. Sanit., Fac. Pharm., Paris, Fr.

Source

Semaine des Hopitaux (1978), 54(29-30-31-32), 953-7 CODEN: SHPAAI; ISSN: 0037-1777

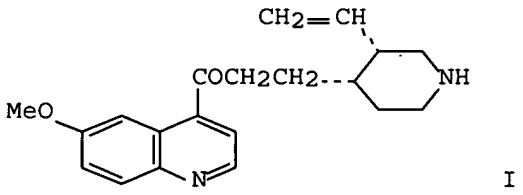
Document Type

Journal

Language

French

Graphics



I

Abstract

Quinicine-HCl (I) [36342-92-4], an isomer of quinidine, is used for its cerebral vasodilating activity. This study was performed in order to find out if I also behaves like an antiarrhythmic agent in animals. The preventive and curative actions of I on ouabain-induced arrhythmia were demonstrated. The mechanism of action of this drug seems to be the same as quinidine-HCl [1668-99-1], i.e. prolongation of refractory period, diminution of atrial and atrioventricular conduction velocities, anticholinergic and local anesthetic properties. The quinuclidine ring is therefore not a major factor in the antiarrhythmic activity of quinine alkaloids.

Controlled or Index Terms

52211-63-9

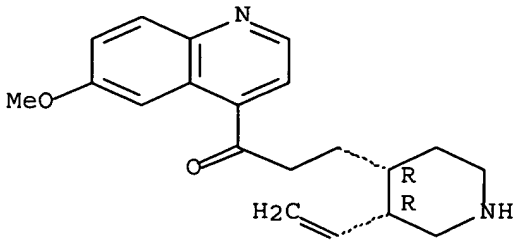
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiarrhythmic activity of, quinidine in relation to)

Hit Structure

CAS Registry Number
52211-63-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

Stereochemistry
Absolute stereochemistry.

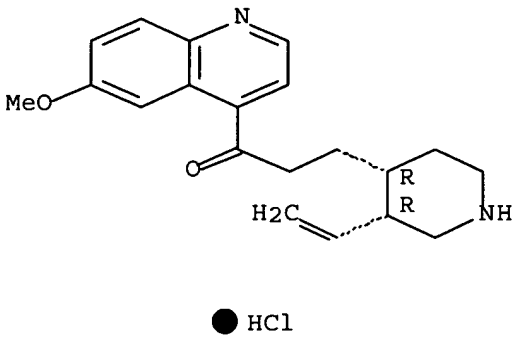
L12 ANSWER 38 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
88:294 CA Full-text
Title
Influence of hypercapnia on the cerebrovascular activities of some drugs used in the treatment of cerebral ischemia
Author/Inventor
Cosnier, D.; Cheucle, M.; Rispat, G.; Streichenberger, G.
Patent Assignee/Corporate Source
Dep. Pharmacol., Cent. Eur. Rech. Mauvernay, Riom, Fr.
Source
Arzneimittel-Forschung (1977), 27(8), 1566-9 CODEN: ARZNAD; ISSN: 0004-4172
Document Type
Journal
Language
English
Abstract
The effects of 12 substances on local cerebral blood flow (LCBF) were studied in the normocapnic and hypercapnic conscious rabbit. In normocapnic, an increase in LCBF was observed after naftidrofuryl oxalate (NAF) [3200-06-4], cinnarizine (CI) [298-57-7], viquidil-HCl (VI) [52211-63-9] and heptaminol acefyllinate (HA) [10075-18-0]. The LCBF was only slightly increased or unchanged after hydrogenated ergot alkaloids (HEA), cyclandelate (CY) [456-59-7], hexobendine (HE) [54-03-5], ifenprodil tartrate (IF) [23210-58-4], piridoxilate (PI) [24340-35-0], vincamine (VC) [1617-90-9] and xanthine niaciate (XN) [437-74-1]. It was reduced by theophylline (TH) [58-55-9]. In hypercapnia, a more pronounced increase in LCBF than in normocapnia was seen with CY, HE, NAF, and VI and a decrease or lesser effect with HA, IF, VC and XN. The decrease in LCBF with TH was enhanced by hypercapnia. The effects of CI, HEA and PI were not modified. The therapeutic implication of these modifications of drug effects by hypercapnia is discussed.
Controlled or Index Terms
52211-63-9

RL: BIOL (Biological study)
(brain circulation response to, in ischemia, hypercapnia effect on)

Hit Structure

CAS Registry Number
52211-63-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 39 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
87:127094 CA Full-text

Title
Effects of viquidil on the electrical and mechanical activity of smooth muscle

Author/Inventor
Cargnelli, G.; Finotti, P.; Melacini, P.; Ferrari, M.

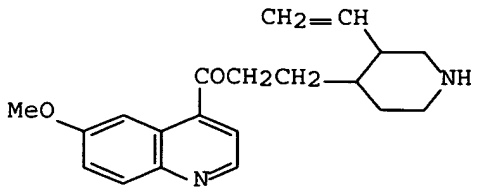
Patent Assignee/Corporate Source
Ist. Farmacol., Univ. Padova, Padua, Italy

Source
Bollettino - Societa Italiana di Biologia Sperimentale (1976), 52(21), 1808-13 CODEN: BSIBAC; ISSN: 0037-8771

Document Type
Journal

Language
Italian

Graphics



I

Abstract

Viquidil (I) [84-55-9] was a less potent spasmolytic than papaverine on intestinal smooth muscle (inhibition of acetylcholine- and BaCl2-induced contractions of isolated guinea pig taenia coli). However, I was 2-fold more potent than papaverine as a spasmolytic on vascular smooth muscular (isolated rabbit ear vasculature contracted by noradrenaline). On the isolated taenia coli at rest, I decreased the frequency of the spontaneous action potentials and increased membrane elec. resistance. However, I was able to abolish the mech. response to acetylcholine without affecting the elec. response. I is apparently a myolytic drug with greatest action on the vascular smooth muscle; part of its mechanism may be due to interference with Ca2+ as a coupling factor between excitation and contraction.

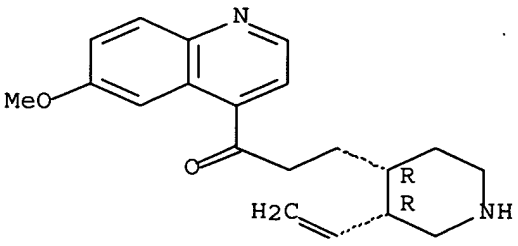
Controlled or Index Terms

84-55-9
RL: PRP (Properties)
(spasmolytic effect of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 40 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

85:87240 CA Full-text

Title

Use of the two-compartment box test in the search for compounds protecting the rat from hypoxia-induced amnesia. Advantages and limits of the method

Author/Inventor

Gouret, Claude; Raynaud, Guy

Patent Assignee/Corporate Source

Cent. Rech. Delalande, Rueil-Malmaison, Fr.

Source

Journal de Pharmacologie (1976), 7(2), 161-75 CODEN: JNPHAG; ISSN: 0021-793X

Document Type

Journal

Language

French

Abstract

In rats, several psychotropics, vasoactive, and cerebral metabolism modifying agents were evaluated for protective affects against hypoxic amnesia using a conditioned passive avoidance reflex. Protection was observed with heptaminol acephyllinate [59989-20-7], cinnarizine [298-57-7], Hydergine [8067-24-1], piracetam [7491-74-9], piribedil [3605-01-4], pyritinol [1098-97-1], viquidil [84-55-9], and vincamine [1617-90-9]. The conditions required for this 2 compartment box text to yield reproducible results were determined

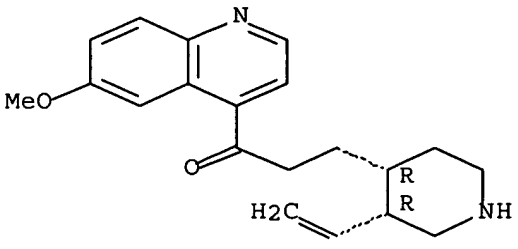
Controlled or Index Terms

84-55-9
RL: BIOL (Biological study)
(amnesia from hypoxia inhibition by)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 41 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

83:33062 CA Full-text

Title

Increasing cerebral blood flow

Author/Inventor

Wirth, Pierre C.

Patent Assignee/Corporate Source

Societe Generale de Recherches et d'Applications Scientifiques "Sogeras", Fr.

Source

U.S., 4 pp. CODEN: USXXAM

Document Type

Patent

Language

English

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3865942	A	19750211	US 1971-138314	19710428

Patent Number (1)

US 3865942

Patent Publication Date (1)

19750211

Application Number (1)

US 1971-138314

Application Date (1)

19710428

Priority Application Information

US 1971-138314	19710428

Priority Patent Number (1)

US 1971-138314

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19710428

Abstract

Viquidil (quinicine)(I) [84-55-9], which is well tolerated by exptl. animals and humans, has been found to have 2-3 times the spasmolytic and vasodilating action of papaverine and further to be effective in the treatment of cerebrovascular insufficiencies. Double-blind clin. studies were carried out on over 200 patients suffering from brain damage associated with insufficient cerebral circulation. Each patient that received I got 0.3 g a day for 2 weeks to 3 mos. Aside from mild digestive reactions in approx. 2% of the patients, pos. improvement was noted in each case. The therapeutic action was demonstrated graphically by a cerebral circulation radiogram. Gelatin capsules were prepared containing 0.1 g I-HCl [52211-63-9].

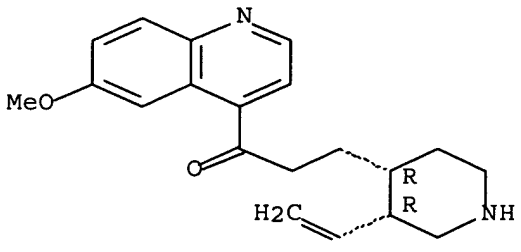
Controlled or Index Terms

84-55-9
RL: BIOL (Biological study)
(cerebrovascular disease treatment with)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 42 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
83:10558 CA Full-text
Title
Alkylsulfonic derivatives of quinine alkaloids
Author/Inventor
Tixier, Rene
Patent Assignee/Corporate Source
Societe Generale de Recherches et d'Applications Scientifiques "Sogeras", Fr.
Source
U.S., 3 pp. CODEN: USXXAM
Document Type
Patent
Language
English
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3828048	A	19740806	US 1971-189106	19711014

Patent Number (1)
US 3828048
Patent Publication Date (1)
19740806
Application Number (1)
US 1971-189106
Application Date (1)
19711014
Priority Application Information

GB 1970-48926	19701014

Priority Patent Number (1)

GB 1970-48926

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19701014

Graphics

For diagram(s), see printed CA Issue.

Abstract

Quaternary quinine alkaloids I, II (n = 3,4) and III (6 compds.), which have the same pharmacol. activities as the parent alkaloids with reduced toxicity (no data), were prepared by treating quinicine, quinidine, quinine, and hydroquinidine with sultones IV (n = 3,4) in an inert solvent at room temperature Thus, a mixture of 16 g IV (n = 3), 400 ml MeCOEt, and 21 g quinine after 5 days at room temperature gave 21 g I.

Controlled or Index Terms

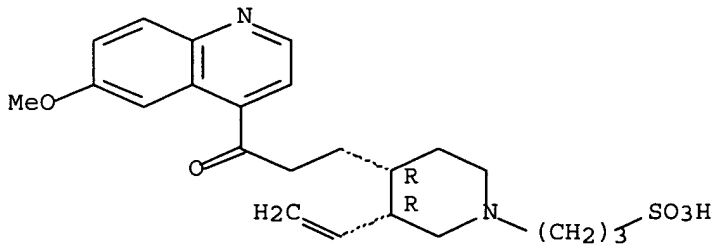
38989-14-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
38989-14-9 CA

Chemical or Trade Name
1-Piperidinepropanesulfonic acid, 3-ethenyl-4-[3-(6-methoxy-4-quinolinyl)-3-oxopropyl]-, (3R-cis)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 43 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

81:176143 CA Full-text

Title

Viquidil embonate

Patent Assignee/Corporate Source

Societe Generale de Recherches et d'Applications Scientifiques "Sogeras"

Source

Ger. Offen., 6 pp. addn. to Ger. Offen. 2,114,368 (CA 76;94872e). CODEN: GWXXBX

Document Type

Patent

Language

German

Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2400079	A1	19740725	DE 1974-2400079	19740102
FR 2213055	A2	19740802	FR 1973-453	19730108
BE 808499	A1	19740329	BE 1973-138751	19731211
NL 7400263	A	19740710	NL 1974-263	19740108
ZA 7400139	A	19741224	ZA 1974-139	19740108
AU 7464308	A1	19750710	AU 1974-64308	19740108
GB 1406205	A	19750917	GB 1974-848	19740108

Patent Number (1)
DE 2400079
Patent Publication Date (1)
19740725
Application Number (1)
DE 1974-2400079
Application Date (1)
19740102
Patent Number (2)
FR 2213055
Patent Publication Date (2)
19740802
Application Number (2)
FR 1973-453
Application Date (2)
19730108
Patent Number (3)
BE 808499
Patent Publication Date (3)
19740329
Application Number (3)
BE 1973-138751
Application Date (3)
19731211
Patent Number (4)
NL 7400263
Patent Publication Date (4)
19740710
Application Number (4)
NL 1974-263
Application Date (4)
19740108
Patent Number (5)

ZA 7400139
Patent Publication Date (5)
19741224
Application Number (5)
ZA 1974-139
Application Date (5)
19740108
Patent Number (6)
AU 7464308
Patent Publication Date (6)
19750710
Application Number (6)
AU 1974-64308
Application Date (6)
19740108
Patent Number (7)
GB 1406205
Patent Publication Date (7)
19750917
Application Number (7)
GB 1974-848
Application Date (7)
19740108
Priority Application Information

FR 1973-453	19730108
BE 1971-763101	19710217

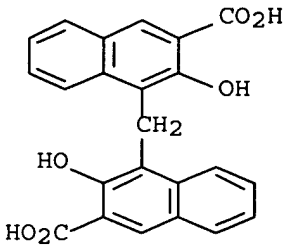
Priority Patent Number (1)
FR 1973-453
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19730108
Priority Patent Number (2)
BE 1971-763101
Priority Kind Code (2)
A
Priority Patent Publication Date (2)
19710217
Abstract
Viquidil embonate with musculotropic, spasmolytic, and vasodilating effects (no data) and useful especially against insufficiencies of the cerebral circulation, was prepared by treatment of viquidil or its hydrochloride with embonic acid.
Controlled or Index Terms
53546-87-5
RL: BIOL (Biological study)
(pharmaceutical)
Hit Structure

CAS Registry Number
53546-87-5 CA

Chemical or Trade Name
2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with (3R-cis)-3-(3-ethenyl-4-piperidinyl)-1-(6-methoxy-4-quinolinyl)-1-propanone (1:1) (9CI) (CA INDEX NAME)

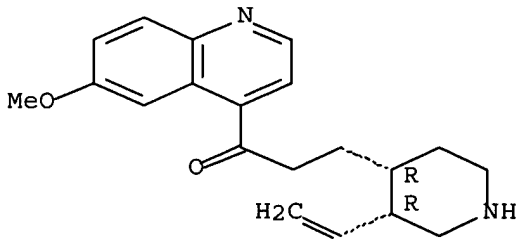
CM
1

CRN 130-85-8
CMF C23 H16 O6



CM
2

CRN 84-55-9
CMF C20 H24 N2 O2



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 44 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

79:126684 CA Full-text

Title

Cleavage of the quinuclidine system in 9-chlorodeoxy bases of the quinine-group alkaloids. II

Author/Inventor

Zielinski, Henryk

Patent Assignee/Corporate Source

Inst. Org. Chem., Pol. Acad. Sci., Poznan, Pol.

Source

Acta Poloniae Pharmaceutica (1973), 30(2), 155-9 CODEN: APPHAX; ISSN: 0001-6837

Document Type

Journal

Language

Polish

Graphics

For diagram(s), see printed CA Issue.

Abstract

9-Chloro-9-deoxydihydroquinine (I) prepared from quinine-HCl and PCl5, treated with MeI gave the methiodide, which was refluxed with 10% NaOH yielding II, II was identified as hydrogen dianisoyl-(+)-tartrate and methiodide. Analogous reactions were carried out starting with quinidine. The final products were identical in either series as the C-8 and C-9 lost their asymmetry.

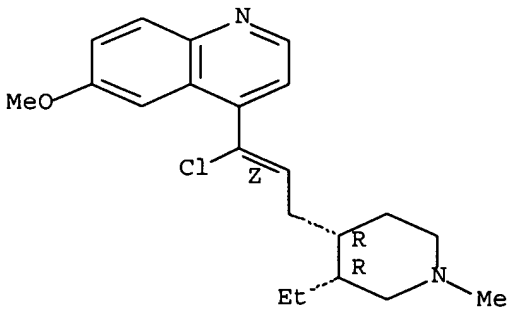
Controlled or Index Terms

50412-63-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
50412-63-0 CA

Chemical or Trade Name
Quinoline, 4-[1-chloro-3-(3-ethyl-1-methyl-4-piperidinyl)-1-propenyl]-6-methoxy-, [3R-[3α,4α(Z)]]- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.
Double bond geometry as shown.

L12 ANSWER 45 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

79:27204 CA Full-text

Title

Quinicine hydrochloride

Author/Inventor

Cataldi, S.; Vacca, C.; Fornara, C. F.; Aloia, L.

Patent Assignee/Corporate Source

Ist. Farmacol. Tossicol., Univ. Napoli, Naples, Italy

Source

Gazzetta Internazionale di Medicina e Chirurgia (1972), 77(23), 1586-97 CODEN: GIMCAK; ISSN: 0016-5662

Document Type

Journal

Language

Italian

Abstract

Quinicine-HCl (I-HCl) [36342-92-4] may be of clin. interest because of its potent vasodilatory and myospasmolytic activities. I (10-50 mg/kg, intragastrically) had no blood pressure, respiratory, or electrocardiographic (ECG) effects in cats and no blood pressure or ECG effects in rats. At 100 mg/kg, I caused a slow decrease in blood pressure in rats. At 10-50 mg/kg, I had no effects on the hypertensive sino-carotid reflex in cats, nor did it alter the response to i.v. noradrenaline or acetylcholine. When given i.v. to rats at 1-20 μg/kg, I caused only a transitory bradycardia associated with sinus bradycardia, while 100 mg/kg was lethal. Results were similar with successive treatments of 1 mg I/kg, while repeated 10 mg/kg doses were lethal to the rats. The vasodilatory action of I was superior to that of papaverine [58-74-2]. When given orally at 10-40 mg/kg, I protected rats against gangrene due to combined treatment with ergotamine [113-15-5] (0.5 mg) and adrenaline [51-43-4] (0.005 mg). I showed a papaverine-like activity in guinea pig colon and ileum, and in pregnant and nonpregnant rat uterus.

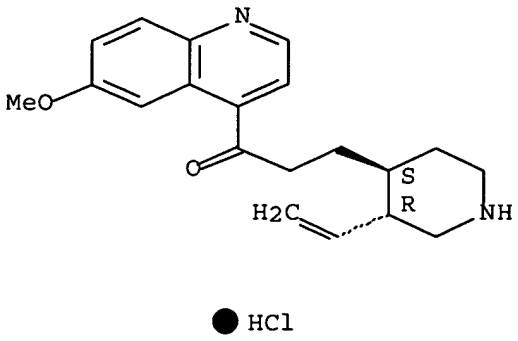
Controlled or Index Terms

35119-27-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacology of)

Hit Structure

CAS Registry Number
35119-27-8 CA

Chemical or Trade Name
1-Propanone, 3-(3-ethenyl-4-piperidinyl)-1-(6-methoxy-4-quinolinyl)-, monohydrochloride, (3R-trans)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 46 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
78:84633 CA Full-text
Title
Viquidil and its salts
Author/Inventor
Wirth, Pierre Charles
Patent Assignee/Corporate Source
Societe Generale de Recherches et d'Applications Scientifiques "Sogeras"
Source
Brit., 3 pp. CODEN: BRXXAA
Document Type
Patent
Language
English
Family Accession Number Count
2
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1295539	A	19721108	GB 1970-21830	19700506
NL 7102930	A	19711109	NL 1971-2930	19710305
DE 2122056	A	19711223	DE 1971-2122056	19710504

Patent Number (1)
GB 1295539
Patent Publication Date (1)
19721108
Application Number (1)
GB 1970-21830
Application Date (1)
19700506
Patent Number (2)
NL 7102930

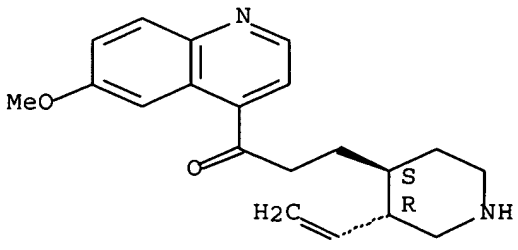
Patent Publication Date (2)
19711109
Application Number (2)
NL 1971-2930
Application Date (2)
19710305
Patent Number (3)
DE 2122056
Patent Publication Date (3)
19711223
Application Number (3)
DE 1971-2122056
Application Date (3)
19710504
Priority Application Information

GB 1970-21830	19700506

Priority Patent Number (1)
GB 1970-21830
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19700506
Abstract
Crude viquidil base, containing quinine and 2 .apprx.3% cinchonicine and obtained from viquidil oxalate, was treated with di-p-toluoyl-d-tartaric acid to give the chromatog. pure salt, from which the pure base was obtained. The hydrochloride and the sulfate were also prepared
Controlled or Index Terms
35119-27-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
Hit Structure

CAS Registry Number
35119-27-8 CA

Chemical or Trade Name
1-Propanone, 3-(3-ethenyl-4-piperidinyl)-1-(6-methoxy-4-quinolinyl)-, monohydrochloride, (3R-trans)- (9CI) (CA INDEX NAME)



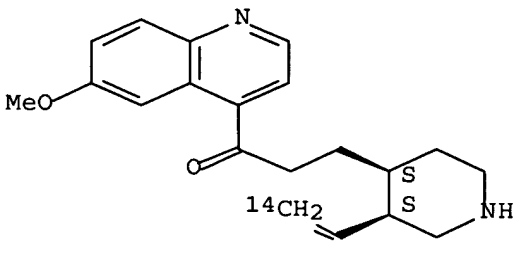
● HCl

Stereochemistry
Absolute stereochemistry.

L12 ANSWER 47 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
77:164411 CA Full-text
Title
Viquidil. Investigation of its metabolism by an isotopic method. I. Synthesis of 14C-labeled viquidil
Author/Inventor
Gueremy, Claude; Uzan, Andre; Tamen, Jean Claude
Patent Assignee/Corporate Source
Rech. Pharm., Ind. Biol. Fr. S.a.r.l., Gennevilliers, Fr.
Source
Arzneimittel-Forschung (1972), 22(8), 1336-40 CODEN: ARZNAD; ISSN: 0004-4172
Document Type
Journal
Language
French
Graphics
For diagram(s), see printed CA Issue.
Abstract
Viquidil-14C [Desclidium-14C, 1-(6-methoxy-4-quinolyl)-3-[3(R)-vinyl-(2- 14C)-4(S)-piper-idyl]-1-propanone] (I) was prepared by mild oxidation of the vinyl group of quinidine to give quinidinal (II, R = CHO) which was treated with Me-14C-P+Ph3 I- to give II (R = CH:14CH2). Isomerization in HOAc gave I. Viquidil is a cerebral vasodilator.
Controlled or Index Terms
38120-93-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
Hit Structure

CAS Registry Number
38120-93-3 CA

Chemical or Trade Name
1-Propanone, 3-[3-(ethenyl-2-14C)-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)-, (3S-cis)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

L12 ANSWER 48 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

77:126453 CA Full-text

Title

1-(6-Methoxy-4-quinolyl)-3-(3-vinyl-4-piperidyl)-1- propanone derivatives

Author/Inventor

Quevauviller, Andre; Hannart, Jean

Patent Assignee/Corporate Source

Omnium Chimique S.A.

Source

Belg., 9 pp. CODEN: BEXXAL

Document Type

Patent

Language

French

Family Accession Number Count

1

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 772399		19720117	BE 1971-772399	19710909

Patent Number (1)

BE 772399

Patent Publication Date (1)

19720117

Application Number (1)

BE 1971-772399

Application Date (1)

19710909

Graphics

For diagram(s), see printed CA Issue.

Abstract

The 1-(6-methoxy-4-quinolyl)-3-(3-vinyl-4-piperidyl)-1-propanone (I, R = Ac) was prepared by acetylating I (R = H). Treating I (R = H) with ClCO2Et and K2CO3 gave I (R = CO2Et).

Controlled or Index Terms

37400-84-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

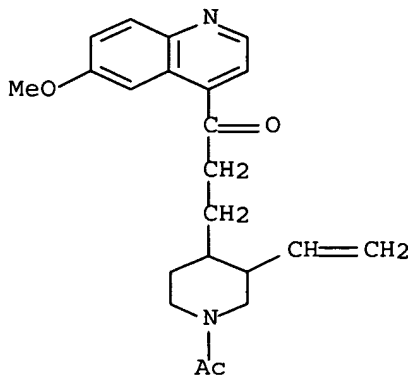
CAS Registry Number
37400-84-3 CA

Chemical or Trade Name
Piperidine, 1-acetyl-3-ethenyl-4-[3-(6-methoxy-4-quinolinyl)-3-oxopropyl]-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

CM
1

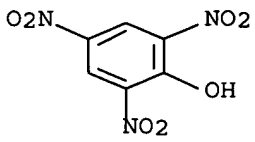
CRN 47540-09-0

CMF C22 H26 N2 O3



CM
2

CRN 88-89-1
CMF C6 H3 N3 O7



L12 ANSWER 49 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
77:48685 CA Full-text

Title
Synthesis of 9-epi-quinine and 9-epi-quinidine

Author/Inventor
Grethe, G.; Gutzwiller, J.; Lee, H. L.; Uskokovic, M. R.

Patent Assignee/Corporate Source
Chem. Res. Dep., Hoffmann-La Roche Inc., Nutley, NJ, USA

Source
Helvetica Chimica Acta (1972), 55(3), 1044-7 CODEN: HCACAV; ISSN: 0018-019X

Document Type
Journal

Language
English

Graphics
For diagram(s), see printed CA Issue.

Abstract
A mixture of 9-epiquinine (I) and 9-epiquinidine (II) is prepared from N-benzoyl-hormomeroquinene (III) in a series of reactions in a stereoselective synthesis. III is converted to the Et ester which is treated with 6-methoxy-4-quinolyllithium to give N-benzoylquinotozine (IV), IV is chlorinated by (Me2CH)2NCl to give epimeric α-chloro ketones which are converted to a pair of threo chlorohydrins. The chlorohydrins are treated with KOH at 20° and debenzoylated to give epoxides, and the epoxides are heated in PhMe

containing MeOH to 2:1 mixture of I and II.

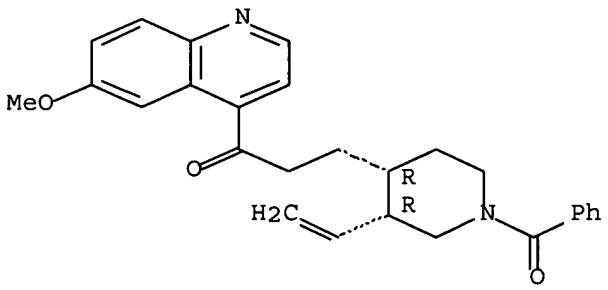
Controlled or Index Terms

38976-75-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
38976-75-9 CA

Chemical or Trade Name
Piperidine, 1-benzoyl-3-ethenyl-4-[3-(6-methoxy-4-quinolinyl)-3-oxopropyl]-, (3R-cis)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 50 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

76:103776 CA Full-text

Title

Vasodilatatively and spasmolytically active quinicine medicaments

Author/Inventor

Wirth, Pierre C.

Patent Assignee/Corporate Source

Societe Generale de Recherches et d'Applications Scientifiques "Sogeras"

Source

Belg., 10 pp. CODEN: BEXXAL

Document Type

Patent

Language

French

Family Accession Number Count

2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 763101	A1	19710716	BE 1971-99895	19710217

GB 1294538	A	19721101	GB 1970-20785	19700430
ZA 7102071	A	19721227	ZA 1971-2071	19710330
NL 7105696	A	19711102	NL 1971-5696	19710427
NL 173597	B	19830916		
NL 173597	C	19840216		
CA 953218	A1	19740820	CA 1971-111682	19710428

Patent Number (1)
BE 763101
Patent Publication Date (1)
19710716
Application Number (1)
BE 1971-99895
Application Date (1)
19710217
Patent Number (2)
GB 1294538
Patent Publication Date (2)
19721101
Application Number (2)
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Application Date (2)
19700430
Patent Number (3)
ZA 7102071
Patent Publication Date (3)
19721227
Application Number (3)
ZA 1971-2071
Application Date (3)
19710330
Patent Number (4)
NL 7105696
Patent Publication Date (4)
19711102
Application Number (4)
NL 1971-5696
Application Date (4)
19710427
Patent Number (5)
NL 173597
Patent Publication Date (5)
19830916
Patent Number (6)
NL 173597
Patent Publication Date (6)
19840216

Patent Number (7)
CA 953218
Patent Publication Date (7)
19740820
Application Number (7)
CA 1971-111682
Application Date (7)
19710428
Priority Application Information

GB 1970-20785	19700430

Priority Patent Number (1)
GB 1970-20785
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19700430
Abstract

Quinicine [1-(6-methoxy-4-quinolyl)-3-([1]-vinyl-4-piperidyl)propanone] (I) prepns. are useful in treating memory and orientation disorders caused by insufficient blood supply to the brain, particularly in old people. I pharmacol. data in exptl. animals and clin. results in humans, given 300 mg per day orally, are given. I is also a superior bronchial spasmolytic to papaverine or theophylline and has 2-3 times the vasodilatory action of papaverine. E.g., an ampul contains I.HCl 20, citric acid 8.4, tri-Na citrate 57.06, Na metabisulfite 10 mg and water add to 2 ml.

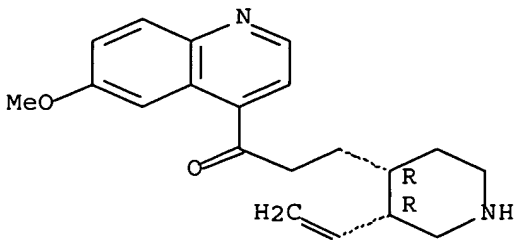
Controlled or Index Terms

84-55-9
RL: BIOL (Biological study)
(spasmolytic and vasodilatator)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

=> d ibib abs fhitstr 51-78

L12 ANSWER 51 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

76:94872 CA Full-text

Title

Viquidil against geriatric cerebrovascular insufficiencies

Author/Inventor

Wirth, Pierre C.

Patent Assignee/Corporate Source

Societe Generale de Recherches et d'Applications Scientifiques "Sogeras"

Source

Ger. Offen., 15 pp. CODEN: GWXXBX

Document Type

Patent

Language

German

Family Accession Number Count

2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2114368	A	19711118	DE 1971-2114368	19710325
DE 2114368	C3	19730308		
GB 1294538	A	19721101	GB 1970-20785	19700430
ZA 7102071	A	19721227	ZA 1971-2071	19710330
NL 7105696	A	19711102	NL 1971-5696	19710427
NL 173597	B	19830916		
NL 173597	C	19840216		
CA 953218	A1	19740820	CA 1971-111682	19710428

Patent Number (1)

DE 2114368

Patent Publication Date (1)

19711118

Application Number (1)

DE 1971-2114368

Application Date (1)

19710325

Patent Number (2)

DE 2114368

Patent Publication Date (2)

19730308

Patent Number (3)

GB 1294538

Patent Publication Date (3)

19721101

Application Number (3)
GB 1970-20785
Application Date (3)
19700430
Patent Number (4)
ZA 7102071
Patent Publication Date (4)
19721227
Application Number (4)
ZA 1971-2071
Application Date (4)
19710330
Patent Number (5)
NL 7105696
Patent Publication Date (5)
19711102
Application Number (5)
NL 1971-5696
Application Date (5)
19710427
Patent Number (6)
NL 173597
Patent Publication Date (6)
19830916
Patent Number (7)
NL 173597
Patent Publication Date (7)
19840216
Patent Number (8)
CA 953218
Patent Publication Date (8)
19740820
Application Number (8)
CA 1971-111682
Application Date (8)
19710428
Priority Application Information

GB 1970-20785	19700430

Priority Patent Number (1)
GB 1970-20785
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19700430
Abstract

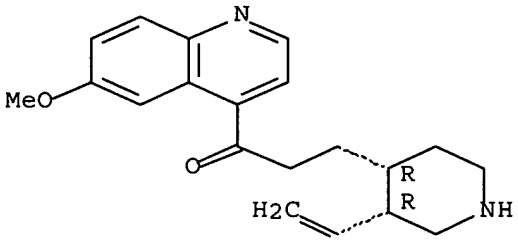
The alkaloid viquidil (1-(6-methoxy-4-quinolyl)-3-(1-vinyl-4-piperidyl)-2- propanone) (I) [84-55-9] (0.3 g/day, orally) was clin. effective in treatment of cerebral vessel injury, cerebrovascular insufficiency, and memory deficiency in humans. I had greater spasmolytic and bronchodilating activity than papaverine.
Controlled or Index Terms
84-55-9
RL: BIOL (Biological study)

(cerebrovascular insufficiencies in senescence treatment by)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

L12 ANSWER 52 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
76:59841 CA Full-text

Title
Purification of viquidil

Author/Inventor
Wirth, Pierre C.

Patent Assignee/Corporate Source
Societe Generale de Recherches et d'Applications Scientifiques "Sogeras"

Source
Ger. Offen., 10 pp. CODEN: GWXXBX

Document Type
Patent

Language
German

Family Accession Number Count
2

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2122056	A	19711223	DE 1971-2122056	19710504
GB 1295539	A	19721108	GB 1970-21830	19700506

Patent Number (1)
DE 2122056

Patent Publication Date (1)
19711223

Application Number (1)
DE 1971-2122056

Application Date (1)
19710504

Patent Number (2)
GB 1295539

Patent Publication Date (2)
19721108

Application Number (2)
GB 1970-21830

Application Date (2)
19700506

Priority Application Information

GB 1970-21830	19700506

Priority Patent Number (1)
GB 1970-21830

Priority Kind Code (1)
A

Priority Patent Publication Date (1)
19700506

Graphics
For diagram(s), see printed CA Issue.

Abstract

The title compound (I) reacted with di-p-toluoyl-d-tartaric acid (II) to give a crystallization salt, from which I was obtained. Thus, I oxalate, prepared from quinine sulfate, was adjusted to pH 9 with aqueous NaOH to give oily I. This was dissolved in MeOH and treated with II at 40-50°; after a few min I di-p-toluoyl-d-tartrate crystallized I hydrochloride and sulfate were also prepared

Controlled or Index Terms

35119-26-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
35119-26-7 CA

Chemical or Trade Name
Butanedioic acid, 2,3-bis[(4-methylbenzoyl)oxy]-, [R-(R*,R*)]-, compd. with (3R-trans)-3-(3-ethenyl-4-piperidinyl)-1-(6-methoxy-4-quinolinyl)-1-propanone (1:1) (9CI) (CA INDEX NAME)

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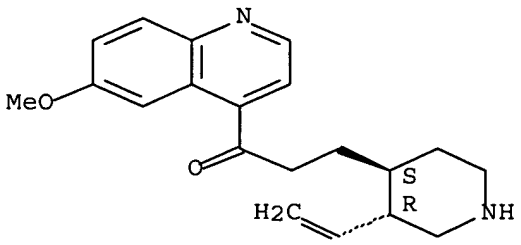
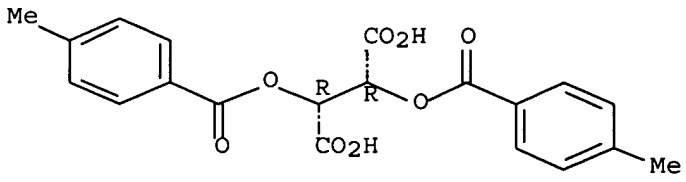
1

CRN 47346-08-7
CMF C20 H24 N2 O2



CM
2

CRN 32634-66-5
CMF C20 H18 O8



Stereochemistry

Absolute stereochemistry.
Absolute stereochemistry.Rotation (-).

L12 ANSWER 53 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

72:90698 CA Full-text

Title

Quinoline and quinine derivatives

Author/Inventor

Gutzwiller, Juerg A. W.; Uskokovic, Milan R.

Patent Assignee/Corporate Source

Hoffmann-La Roche, F., und Co., A.-G.

Source

Ger. Offen., 122 pp. CODEN: GWXXBX

Document Type

Patent

Language

German

Family Accession Number Count

6

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1933600	A	19700108	DE 1969-1933600	19690702
CH 533622	A	19730330	CH 1969-9861	19690627
CH 559181	A	19750228	CH 1971-14523	19690627
CH 559183	A	19750228	CH 1971-14524	19690627
CH 559184	A	19750228	CH 1971-14525	19690627
BE 735451	A	19700102	BE 1969-735451	19690701
FR 2012152	A5	19700313	FR 1969-22136	19690701
FR 2012152	B1	19730810		
AT 300813	B	19720810	AT 1971-494	19690701
AT 319482	B	19741227	AT 1969-6270	19690701
AT 323338	B	19750710	AT 1969-49371	19690701
NL 6910136	A	19700106	NL 1969-10136	19690702
NL 162384	B	19791217		
NL 162384	C	19800516		
GB 1280201	A	19720705	GB 1969-1280201	19690702
GB 1280202	A	19720705	GB 1969-1280202	19690702

GB 1280203	A	19720705	GB 1969-1280203	19690702
SE 364044	B	19740211	SE 1969-9413	19690702
CA 954516	A1	19740910	CA 1969-55886	19690702
DK 129235	B	19740916	DK 1969-3590	19690702
SE 375776	B	19750428	SE 1972-12265	19690702
IL 32535	A1	19750522	IL 1969-32535	19690702
SE 376612	B	19750602	SE 1972-12266	19690702
JP 49007160	B4	19740219	JP 1971-56691	19710728
FR 2108178	A5	19720519	FR 1971-35510	19711001
FR 2108178	B1	19740322		
CA 954517	A2	19740910	CA 1971-126550	19711101
CA 974994	A2	19750923	CA 1971-126549	19711101
US 3869461	A	19750304	US 1973-354838	19730426

Patent Number (1)
DE 1933600
Patent Publication Date (1)
19700108
Application Number (1)
DE 1969-1933600
Application Date (1)
19690702
Patent Number (2)
CH 533622
Patent Publication Date (2)
19730330
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CH 1969-9861
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Patent Number (3)
CH 559181
Patent Publication Date (3)
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Application Date (3)
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Patent Number (4)
CH 559183
Patent Publication Date (4)

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CH 1971-14524
Application Date (4)
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FR 1969-22136
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Patent Number (9)
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Patent Publication Date (9)
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Application Number (9)
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Application Date (9)
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Patent Number (10)
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Patent Publication Date (10)
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Application Number (10)
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Application Date (10)
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AT 323338
Patent Publication Date (11)

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Application Number (11)
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Application Date (11)
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Patent Publication Date (12)
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Application Number (12)
NL 1969-10136
Application Date (12)
19690702
Patent Number (13)
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Patent Publication Date (13)
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Patent Number (14)
NL 162384
Patent Publication Date (14)
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Patent Number (15)
GB 1280201
Patent Publication Date (15)
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Application Number (15)
GB 1969-1280201
Application Date (15)
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Patent Number (16)
GB 1280202
Patent Publication Date (16)
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Application Number (16)
GB 1969-1280202
Application Date (16)
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Patent Number (17)
GB 1280203
Patent Publication Date (17)
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Application Number (17)
GB 1969-1280203
Application Date (17)
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Patent Number (18)
SE 364044
Patent Publication Date (18)
19740211
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SE 1969-9413
Application Date (18)

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Patent Number (19)
CA 954516
Patent Publication Date (19)
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Application Number (19)
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Application Date (19)
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Patent Number (20)
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Patent Publication Date (20)
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Application Number (20)
DK 1969-3590
Application Date (20)
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Patent Number (21)
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Patent Publication Date (21)
19750428
Application Number (21)
SE 1972-12265
Application Date (21)
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Patent Number (22)
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Application Number (23)
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Application Date (23)
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Patent Publication Date (24)
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Patent Number (25)
FR 2108178
Patent Publication Date (25)

19720519
Application Number (25)
FR 1971-35510
Application Date (25)
19711001
Patent Number (26)
FR 2108178
Patent Publication Date (26)
19740322
Patent Number (27)
CA 954517
Patent Publication Date (27)
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Application Number (27)
CA 1971-126550
Application Date (27)
19711101
Patent Number (28)
CA 974994
Patent Publication Date (28)
19750923
Application Number (28)
CA 1971-126549
Application Date (28)
19711101
Patent Number (29)
US 3869461
Patent Publication Date (29)
19750304
Application Number (29)
US 1973-354838
Application Date (29)
19730426
Priority Application Information

US 1968-741914	19680702
CA 1969-55886	19690702
US 1971-212648	19711227

Priority Patent Number (1)
US 1968-741914
Priority Kind Code (1)
A
Priority Patent Publication Date (1)
19680702
Priority Patent Number (2)
CA 1969-55886
Priority Kind Code (2)
A3
Priority Patent Publication Date (2)
19690702

Priority Patent Number (3)
US 1971-212648
Priority Kind Code (3)
A3
Priority Patent Publication Date (3)
19711227
Graphics
For diagram(s), see printed CA Issue.
Abstract
The title compds. (I), quinine related, were prepared Thus a solution of 151 g racemic 2-benzoyl-1,3,4,7,8, 8a-hexahydro-6(2H)isoquinolone (II) in 300 ml absolute EtOH and 300 ml 3N HCl was hydrogenated over 30 g 5% Rh-Al2O3 to give a product containing 61.9% racemic cis-2-benzoyloctahydro-6(2H)isoquinolone (III) and 13% of the racemic trans isomer (IV); III m. 147-8.5°. Hydrogenation of 25.5 g II in 1 1.95% EtOH over 2.5 g 10% Pd-C at 3 atm gave racemic IV, m. 157.5-59° (absolute EtOH). IV (23.4 g), 2.24 g 4-MeC6H4-SO3H, and 9.83 g (-)-butane-2(R), 3(R)-diol in 2 l. anhydrous C6H6 was refluxed 3 hr with azeotropicsepn. of H2O to give 12.95 g 2'-benzoyl-4(R),5(R)-dimethyl-1',2',3',4',4a'(R),7',8',8a'(R)- octahydrospiro[1,3-dioxolane-2,6'(5'H)isoquinolone] (V), m. 182-4° (Et2O), [α]25D -8.75° (c 0.96, MeOH), and 12.45 g 2'-benzoyl-4(R),5(R)-dimethyl-1',2',3',4',4a('S),7',8',8a'(S)- octahydrospiro[1,3-dioxolane-2,6'(5'H)isoquinolone] (VI), m. 147-8.5° (1:1 EtOH-H2O), [α]25D 9.95° (c 1.005, MeOH). Treatment of 0.329 g V with 50 ml 70% HOAc 4.67 hr at 100-5° gave 0.256 g 4a(R),8a(R)-2-benzoyloctahydro- 6(2H)isoquinolone (VII), m. 151-3° (absolute EtOH), [α]25D -62.6° (c 1.005, CHCl3). VI (2.5 g) and 100 ml 70% HOAc heated 1.5 hr at 100-5° gave 2 g 4a(S),-8a(S)-2-benzoyloctahydro- 6(2H)isoquinolone (VIII), m. 151-3° (absolute EtOH), [α]26D 61.8 ° (c 1.01, CHCl3). To 20.6 g III in 800 g polyphosphoric acid was added 10 g NaN3,and the mixture stirred 16 hr at 55-60° to give racemic cis-7-benzoyldecahydro-2H-pyrido[3,4-d]azepin-2-one (IX), m. 167-8.5° (Me2CO). From 2.57 g VIII and 1.3 g NaN3 in 100 g polyphosphoric acid was prepared 2.72 g 5a(S),9a(S)-7-benzoyldecahydro-2H- pyrido-[3,4-d]azepin-2-one (X); alcoholate m. 200-3° (absolute EtOH), [α]25D 37.83 °(c 1.0547, CHCl3). Similarly prepared from 5.15 g IV and from 1.02 g II, resp., were: 5.45 g trans-7-benzoyldecahydro-2H- pyrido[3,4-d]azepin-2-one (XI), m. 187-9° (EtOHEt2O); and racemic 2-benzoyl-1,2,3, 4,7,8,9,9a-octahydro-6H-pyrido[3,4-d]azepin-6-one (XII), m. 219-21° (Me2CO). Hydrogenation of 5.4 g XII over 5.4 g 5% Rh-Al2O3 in 450 ml absolute EtOH and 10 ml 3N HCl gave IX. Alcoholysis of 2.8 g IX by 500 ml 5% alc. HCl, under reflux 100 hr, gave racemic Et cis-1-benzoyl-3-(2-aminoethyl)piperidine-4-acetate (XIII), oil. Alcoholysis of XI gave the trans isomer (XIV). A mixture of 1.91 g XIII, 1.38 g HCO2H, and 1.05 g 37% CH2Owas heated 1 hr at 100° to give Et cis-1-benzoyl-3-(2-dimethylaminoethyl)piperidine-4-acetate, which in 10 ml MeOH was treated with 2ml 30% H2O2 at 0°, and the mixture stirred 16 hr at room temperature to give racemic Et cis-1-benzoyl-3-(2- dimethylaminoethyl)piperidine-4-acetate N-oxide, which was converted into racemic Et cis-1-benzoyl-3-vinylpiperidine-4-acetate (XV), m. 66-8° (C6H14) by heating 25 min at 90-125°. The racemic trans isomer (XVI), glass, was similarly prepared from XIV. To a mixture of 5.521 g N2O4 and 9.84 g anhydrous NaOAc in 360 ml CCl4 (prepared at -70°) was added at 0° 10.88 g IX in 40 ml CH2Cl2 to give racemic cis-7-benzoyl-1-nitrosodecahydro-2H-pyrido[3,4-d]azepin-2-one (XVII); the racemic trans analog (XVIII) was similarly prepared from XI. Heating XVII at 120° 1 hr under N gave racemic cis-1-benzoyl-3-vinylpiperidine-4- acetic acid (XIX), oil. By similar methods XVIII was converted into the racemic trans isomer (XX), oil, and 3.86 g X was converted into 2.34 g 1-benzoyl-3(S)-vinylpiperidine-4(S)-acetic acid (XXI), oil. Action of 1 g CH2N2 in 50 ml Et2O on 5.29 g XIX in 500 ml Et2O gave the racemic cis Me ester (XXII), oil; 0.476 g XX in 4ml MeOH and 9 ml CH2N2 solution in Et2O (3 g/130 ml) gave 0.201 g racemic trans Me ester (XXIII), oil; and 2.34 g XXI gave 1.059 g Me 1-benzoyl-3(S)-vinylpiperidine-4(S)-acetate (XXIV), [α]25D -1.61° (c 1.1193, CHCl3). Addition of 22.4 g KOCMe3 in 300 ml anhydrous THF to 37.24 g di-Et glutaconate and 70.08 g NCCH2CO2CH2Ph in 100 ml THF over 4 hr, and refluxing 12 hr gave 42.55 g racemic Ph-CH2O2CCH(CN)CH(CH2CO2Et)2 (XXV), b0.15 167-74°. Ethylation of 18 g XXV by 15.6 g EtI and 6.72 g KOCMe2 in 200 ml-THF 3 hr gave 11.35 g racemic PhCH2O2CCEt(CN)CH(CH2CO2Et)2 (XXVI), b0.025 154-9°. Hydrogenolysis of 23.4 g XXVI in 600 ml 95% EtOH over 3 g 10%Pd-C gave 14.17 g NCCHEt(CH2CO2Et)2 (XXVII), b0.0284-6°. XXVII (101.23 g) was hydrogenated over 31.8 g Raney Ni in 1200 ml absolute EtOH at 110 atm to give 57.6 g racemic cis-4-ethoxycarbonylmethyl-5-ethyl-2-piperidone (XXVIII), m. 89-91° (CH2Cl2-Et2O), and 16 g racemic trans isomer, oil. XXVIII (0.64 g) was treated with 0.684 g Et3O+BF4- in 20 mlanhyd. CH2Cl2 at room temperature 65 hr, evaporated, the residue dissolved in 20 ml absolute EtOH, 0.25 g NaBH4 was added at 0

°, and the mixture kept 23 hr at room temperature to give 0.591 g racemic Et cis-3-ethylpiperidine-4- acetate (XXIX), b0.5 91-2°. To 0.032 mole (Me2CH)2NLi in 7:3 C6H6-Et2O was added 5.6 g 6-methoxylepidine in 60 ml THF, the mixture kept 20 min, 4.6 g XXII in 60 ml THF added, and the mixture stirred 1 hr at 20° to give racemic cis-6-methoxy-4-[3-(1-benzoyl-3-vinyl-4- piperidyl)-2-oxopropyl]quinoline. This (2.8 g) in 150 ml PhMe at 0° was reduced by 12 ml 25% (Me2CH)2AlH in PhMe. To the racemic product in 40 ml Me2CO was added 1 g dibenzoyl-d-tartaric acid in 10 ml MeOH. Recrystn. 4 times from MeOH-Me2CO gave the epimeric cis-6-methoxy-4- 3-[3(R)-vinyl-4(S)-piperidyl]-2-hydroxypropyl quinoline (XXX) dibenzoyl-d-tartrate, m. 189-90°, [α]25D -27.4° (c 0.82, MeOH); XXX, oil, [α]25D 39.6° (c 1.425, CHCl3). Acetylation of 1.15 g XXX by 40 ml HOAc and 4 ml BF3.Et2O 18 hr at 50° gave 6-methoxy-4- 3-[3(R)-vinyl-4(S)-piperidyl]-2-acetoxypropyl quinoline (XXXI), glass, [α]25D 21.4° (c 0.835, CHCl3). Dehydration of 0.6 g XXX in 20 ml C5H5N by 1 ml SOCl2 4 hr at 0-20° gave 6-methoxy-4- 3-[3(R)-vinyl-4(R)-piperidyl]prop-1-enyl quinoline (XXXII). To 1.241 g XXXI in 150 ml C6H6 and 7.5 ml HOAc was added 17g NaOAc.3H2O and the mixture refluxed 14 hr to give a mixture (mixt.A) of deoxyquinine and deoxyquinidine. A solution of 0.826 g mixture A in 40 ml 4:1 Me2SO-Me2COH was treated 10 min at 20° with dry O, 0.6 g KOCMe3 added, and the oxidn.continued until 71.5 ml O was taken up to give a mixture (I) [(R1)m = 6-MeO, R2 = vinyl) of quinine and quinidine. Other examples were given.

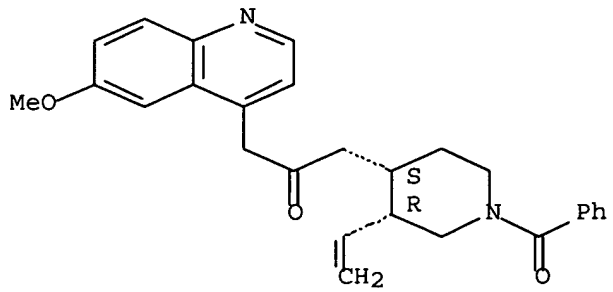
Controlled or Index Terms

26013-24-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

Hit Structure

CAS Registry Number
26013-24-1 CA

Chemical or Trade Name
Piperidine, 1-benzoyl-3-ethenyl-4-[3-(6-methoxy-4-quinolinyl)-2-oxopropyl]-, cis- (9CI) (CA INDEX NAME)



Stereochemistry

Relative stereochemistry.

L12 ANSWER 54 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

58:39332 CA Full-text

Title

Identification of drugs containing unsaturated groups by paper chromatography

Author/Inventor

Bobranski, B.; Syper, L.

Patent Assignee/Corporate Source

Med. Acad., Wroclaw, Pol.

Source

Microchemical Journal, Symposium Series (1962), 2, 749-56 CODEN: MJSSAZ; ISSN: 0544-0165

Document Type

Journal

Language

Unavailable

Abstract

Hg(OAc)2 in MeOH was added to drugs containing double bonds and followed by separation by partition chromatography. The spots were detected by treating the dried chromatogram with HCl and spraying with dithizone solution A mixture of Dial, Alurat, Baytinal, Narconumal, Seconal, and Alphenal were separated and identified by an ascending development and reversed-phase technique. The best separation was obtained with a 30% solution containing Tetralin and cyclohexanol in petr. ether as stationary phase (10:5) and a solution containing HOAc and water (8:40) (saturated with stationary phase) as mobile phase. Similarly, mixts. of quinine, cinchonidine, cinchonine, quinidine, and quinotoxin, or strychnine and brucine could be separated and identified.

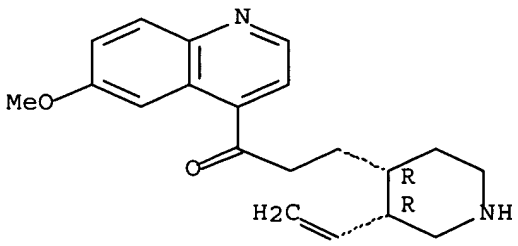
Controlled or Index Terms

84-55-9, Quinicine
(separation and detection of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

58:6647a-b

L12 ANSWER 55 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

57:23488 CA Full-text

Title

Colorimetric and polarographic determination of quinotoxine in the presence of large amounts of quinine. Pertinence to pharmacy

Author/Inventor

Girard, Maurice; Rousselet, Francois

Patent Assignee/Corporate Source

Fac. Pharm., Paris

Source

Ann. Pharm. Franc. (1962), 20, 109-15

Document Type

Journal

Language

Unavailable

Abstract

Quinotoxine (quinicine) (I) is an isomer of quinine and quinidine in which the secondary alc. group is replaced by a ketone group and the ring is opened. It can be obtained by heating acidic solns. of quinine. The colorimetric determination cannot be used if other ketones are present. The alkaloid in 0.5 ml. ketone-free absolute EtOH is treated with 0.2 ml. alc. KOH (2 g. KOH in 2.5 ml. H2O, made up to 10 ml. with EtOH) and 0.3 ml. of a solution of 0.3 g. m-dinitrobenzene in 10 ml. EtOH for 15 min. at 37°. The solution is then diluted with 5 ml. EtOH at 60° and 2.5 ml. CHCl3 is added. To prevent separation of the phases, the tubes are placed in a 45-50° water bath for 30 sec. and read at 550 mμ. Twenty-five γ I can be determined in the presence of 25 mg. quinine. The polarographic measurement was carried out in pH 4.4 buffer (12.6 ml. 0.2M HOAc and 7.4 nd. 0.2M NaOAc). Under these conditions, the 1+2-wave potential is -0.59 v. for I and -0.85 v. for quinine. Ten γ/ml. of I can be determined in the presence of 1000 parts quinine. When the quinine concentration is >1 mg./ml., 0.05 ml. of a 0.1% gelatin solution should be added to the electrolytic solution The accuracy and precision and sensitivity of the 2 methods are about the same.

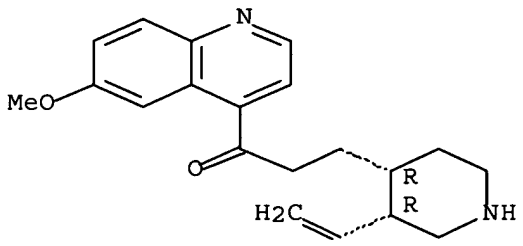
Controlled or Index Terms

84-55-9, Quinicine
(determination in presence of quinine)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

57:4765e-i

L12 ANSWER 56 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

57:10781 CA Full-text

Title

Derivatives of 1-azabicyclo[3.2.1]octane, similar to quinine alkaloids

Author/Inventor

Chizhov, A. K.

Patent Assignee/Corporate Source

S. Ordzhonikidze All-Union Chem.-Pharm. Res. Inst., Moscow

Source

Zhurnal Obshchei Khimii (1961), 31, 3469 77 CODEN: ZOKHA4; ISSN: 0044-460X

Document Type

Journal

Language

Unavailable

Abstract

Et 3-pyridylacrylate-HCl was hydrogenated over PtO2 in EtOH to 90% Et -(3-piperidyl)- propionate, b6.5 119 °, n20D 1.4635, which with BzCl in CHCl3 with powdered K2CO3 gave the N-benzoyl derivative, b0.15 186°. This was added in xvlene with Et 6-methoxyquino-line-4-carboxylate (I) to EtONa in xylene and heated 7 hrs. at 90% then acidified with HCl and heated 4 hrs. After separation of BzOH, the filtrate was made alkaline and extracted with Et2O to yield 53.6% 2-(3-piperidyl)ethyl 6-methoxy-4-quin-olyl ketone, a brown oil; dipierate, yellow, decomposed at 64-8°. This with Br in 47.5% HBr at 70-80° 65 rain. gave after treatment with aqueous Na2CO3 74.9% 1-azabicyclo[3.2.1l-7-octyl 6-methoxy-4-quinolyl ketone, a spongy brown solid, m. about 65° (dipicrate decomposed at 140°). Hydrogenation over Pd in N HCl gave 58.8% 1-azabicyclo[3.2.1]-7-octyl(6-methoxy-4-quinolyl)carbinol, m. 60-2° (dipicrate, an amorphous yellow solid). 3-(2-Hydroxyethyl)-4- methyl-pyridine with alc. HCl gave the hydrochloride, m. 108-10°, which was hydrogenated over PtO2 in absolute EtOH to 98.4% 3-(2-hydroxyethyl)-4-methylpiperidine, b10 139.5-41 °, which with BzCl in CHCl3-K2CO3 suspension gave 77.8% N-benzoyl-3-(2-hydroxyethyl)-4- methyipiperidine, b0.25 227-9°, n18D 1.5537. This with SOCl2 5 hrs. at 70° in CHCl3, followed by aqueous NaHCO3 gave N-benzoyl-3-(2-chloroethyl)-4-methylpiperidine, n20D 1.5488, d20 1.1297, which refluxed directly with alc. NaCN 65 hrs. gave 70.3% N-benzoyl-3-(2-cyanoethyl)-4-methylpiperidine, b0.2 185-7°, n20D 1.5467, which refluxed with concentrated HCl 51 hrs. gave, after heating the crude product with absolute EtOH and dry HC15 hrs., 55.4% 3-(2- carbethoxyethyl)-4-methylpiperidine, b17 142-4%, 1.4670, which with BzCl in CHCl3-K2CO3 gave N-benzoyl derivative, b0.15 168-9°, which treated with EtONa in xylene in the presence of I, as above, gave 2-(4-methyl-3-piperidyl)-ethyl 6-methoxy-4-quinolyl ketone, a brown oil (dipicrate m. 177.5-9.5°), which heated with Br in 47% HBr 45 rain. as above gave 82.5% 4-methyl-l-azabicyclo[3.2.1]-7-octyl 6-methoxy-4-quinolyl ketone, in. 60-6° (dipicrate m. 124-6°). Hydrogenation over Pd in N HCl gave 72.9% 4-methyl-l-azabicyclo [3.2.1]-7-octy1(6-methoxy-4-quiuolyl)-carbinol, m. 57-60° (dipicrate m. 115-17°). The products are more toxic than quinine and inactive.

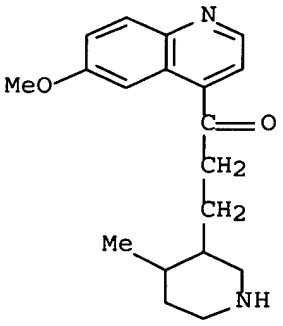
Controlled or Index Terms

94437-45-3, 1-Propanone, 1-(6-methoxy-4-quinolyl)-3-(4-methyl-3-piperidyl)-
(preparation of)

Hit Structure

CAS Registry Number
94437-45-3 CA

Chemical or Trade Name
1-Propanone, 1-(6-methoxy-4-quinolyl)-3-(4-methyl-3-piperidyl)- (7CI) (CA INDEX NAME)



Original Reference
57:2183d-i

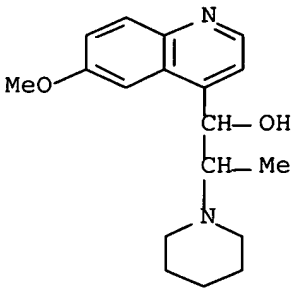
L12 ANSWER 57 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
52:92966 CA Full-text
Title
N-Phenylquinoline perchlorate
Author/Inventor
Pilyugin, G. T.; Gutsulyak, B. M.
Document Type
Patent
Language
Unavailable
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 109979		19580225	SU	

Patent Number (1)
SU 109979
Patent Publication Date (1)
19580225
Application Number (1)
SU
Abstract
Solid diphenylamine is condensed with solid paraformaldehyde and paraldehyde. The condensation is carried out in a hermetically closed apparatus in dioxane and in the presence of HCl at approx. 100° for about 6 hrs. The reaction product is extracted with ether and hot alc. and the alc. extract is treated with an aqueous solution of KClO4 to give the title compound
Controlled or Index Terms
109701-14-6, 4-Quinolinemethanol, 6-methoxy-α-1-piperidinoethyl-, hydrobromide
(preparation of)
Hit Structure

CAS Registry Number
109701-14-6 CA

Chemical or Trade Name
4-Quinolinemethanol, 6-methoxy-α-1-piperidinoethyl-, hydrobromide (6CI) (CA INDEX NAME)



● HBr

Original Reference
52:16378h-i

L12 ANSWER 58 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
52:61430 CA Full-text
Title
Quinoline derivatives
Author/Inventor
Albers, Henry
Patent Assignee/Corporate Source
Knoll A.-G., Chemische Fabriken
Document Type
Patent
Language
Unavailable
Family Accession Number Count
1
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 880444		19530622	DE 1950-K2693	19500423

Patent Number (1)
DE 880444
Patent Publication Date (1)
19530622
Application Number (1)
DE 1950-K2693
Application Date (1)
19500423
Abstract

Derivs. of 6-alkoxyquinoline-4-carbinols show chemotherapeutical action. To a solution of 6-methoxyquinolyl-4-aldehyde (I) in 200 ml. dry pyridine, 10 g. HCN is added. After a short time, the precipitated cyanohydrin (II) is filtered off and washed with pyridine and petr. ether to give almost 100% yield, m. 180° (decomposition). II (15 g.) is heated with concentrated HCl on a steam bath for some hrs., evaporated to dryness, dissolved in water, made alkaline and extracted with Et2O; 6-methoxyquinolyl-4-carbinol, m. 131°, ppts. from the Et2O. II (24 g.) is dissolved in 250 ml. absolute ethanol saturated with dry HCl; the solution is again saturated with HCl and kept overnight at 0°. The precipitated crystalline imino ether hydrochloride (III) is separated and the mother liquor evaporated in vacuo. The residual oil and III are dissolved in water; ether is added to form a layer and saturated aqueous (NH4)2CO3 added until the mixture is slightly alkaline The Et2O layer, containing Et 6-methoxyquinolyl-4-glycolate (IV), is evaporated and IV recrystd. from ethanol, m. 134°, yield 80%. IV and BzCl in CHCl3 in the presence of ethanolamine give the O-Bz derivative, b1 150-70 °. Action of acids and Cu(OAc)2 on IV gives 6,6'-dimethoxy-4,4'-quinoloin, m. 66° (hydrochloride, m. 250-2°) , also obtained by acyloin condensation from I. I (0.45 g.) in 20 ml. 50% ethanol is treated with 6 ml. of supernatant solution obtained by centrifuging a mixture of 3 ml. absolute ethanol and 3 ml. enzyme solution prepared according to Albers and Hamann (C.A. 27, 741); 2 ml. aqueous NaCN (containing 0.1276 g. NaCN), 7.8 ml. N HOAc, and 9.8 ml. absolute ethanol are mixed, filled up to 23.55 ml. with 50% ethanol and added to the above solution; the precipitated optically active (dextro in quinoline-HOAc) Na salt of II is filtered off and washed with ethanol. II (40 g.), 40 g. HOAc, and 120 g. concentrated H2SO4 are mixed under cooling, kept 3 days at 0° and 3 days at room temperature, poured on ice, and made alkaline with 25% aqueous NH4OH. The precipitated NH4 6-methoxyquinolyl-4-glycolate is recrystd. from hot H2O (yield 95%).

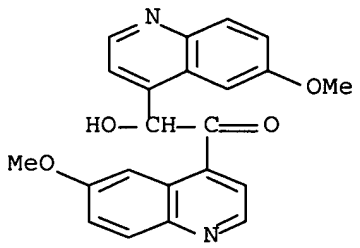
Controlled or Index Terms

102704-70-1, Ketone, hydroxy(6-methoxy-4-quinolyl)methyl 6-methoxy-4-quinolyl (preparation of)

Hit Structure

CAS Registry Number
102704-70-1 CA

Chemical or Trade Name
Ketone, hydroxy(6-methoxy-4-quinolyl)methyl 6-methoxy-4-quinolyl (6CI) (CA INDEX NAME)



Original Reference
52:11127g-i,11128a-b

L12 ANSWER 59 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
51:99130 CA Full-text

Title
Dialkylaminoalkylquinolines

Author/Inventor

Adams, E. P.; Doyle, F. P.; Nayler, J. H. C.

Patent Assignee/Corporate Source

Beecham Research Lab., Ltd., Betchworth, UK

Source

Journal of the Chemical Society (1957) 3066-71 CODEN: JCSOA9; ISSN: 0368-1769

Document Type

Journal

Language

Unavailable

Abstract

A series of 2-, 4-, 6-, and 8-dialkylaminoalkylquinolines and their simple derivs. were prepared for pharmacol. evaluation. The bases were characterized as the more easily purified monopicrates and di-HCl and MeI salts were prepared for pharmacol. examination which showed that this group of compds. has no outstanding pharmacol. properties. Contrary to the findings of Boekelheide and Marinetti (C.A. 46, 6649i) the Mannich reaction with quinaldine, HCHO and NHMe2 under various conditions gave only good yields of 2-[bis(dimethylaminomethyl)methyl]quinoline, b0.1 102-6°, but no simple Mannich base, 2-(β-dimethylaminoethyl)quinoline, b0.7 120-9°. The Mannich reaction with NHEt2-HCl gave a satisfactory yield of 2-(β- diethylaminoethyl)quinoline (I) (cf. H.acte.eou-F.acte.eo Tseou, C.A. 31, 6536). The preparation of 2-(β-piperidinoethyl)-quinoline according to H.-F. T. (loc. cit.) was repeated. Quinaldine (14 ml.), 8.5 ml. 38% HCHO, 10 ml. piperidine, 10 ml. alc., and 18 ml. 5N HCl were heated 90 min. at 50-5° and the mixture evaporated in vacuo, 15 g. Na2CO3 in H2O added and the mixture extracted with Et2O, the washed and dried extract evaporated, the residue distilled and the yellow oil, b0.2 140-57° fractionated gave 3.1 g. pure 2-(1-methylene-2-piperidinoethyl)quinoline (II), b0.6 127-32°, together with 3.4 g. less pure material; monopicrate, m. 203-4° (from MeCOEt). The procedure of Kermack and Muir (C.A. 26, 1285) for isolation of I through the picrate gave a good yield of a product, m. 137-9°, recrystd. from alc. to a supposedly pure derivative, m. 153-6°, but crystallized from MeCOEt to give a small yield of II monopicrate. On account of the known marked influence of the nature of the secondary amine on the course of the Mannich reaction the behavior of quinaldine and HCHO with pyrrolidine-HCl salt was examined Quinaldine (28 ml.), 17 ml. 38% HCHO, 16.5 ml. pyrrolidine, 40 ml. alc., and 36 ml. 5N HCl heated 5 hrs. at 60° and the mixture concentrated in vacuo, the concentrate diluted with H2O and unchanged quinaldine extracted with Et2O, the aqueous phase basified with 50 g. Na2CO3 and the oily product extracted with Et2O, the washed and dried exts. evaporated and the residue fractionated gave 6.1 g. material, b0.05 120°, treated with alc. picric acid to give 2-(β-pyrrolidinoethyl)quinoline dipicrate, m. 164-5° (from Me2CO), and 6.9 g. material, b0.07 140-56°, treated with alc. picric acid to yield 2-[bis(pyrrolidinomethyl)methyl]quinoline dipicrate, m. 178-9° (decomposition) (from MeCN). Reductive cyclization of 5-(3,4-dimethoxy-6-nitrophenyl)-1-dimethylamino-4-penten-2-one-HCl gave 6,7-dimethoxy-2-(β-dimethylaminoethyl)quinoline-2HCl, m. 208° (decomposition) (from MeOH-Et2O) [Mannich and Schilling (C.A. 33, 37961) reported the HCl salt, m. 176°]. In contrast to the complexities encountered in the Mannich reaction with quinaldine, lepidine (III), and substituted lepidines gave only 4-(β-dialkylaminoethyl)quinolines as isolable products. III (6 ml.), 4 ml. 38% HCHO, 4.5 ml. NHEt2, 8 ml. alc., and 8 ml. 5N HCl heated 5 hrs. at 60-5° and evaporated in vacuo, the product washed with Me2CO and crystallized from iso-PrOH gave 1.95 g. 4-R2NCH2CH2C9H6N (IV) (R = Et).HCl, m. 155-6° . Similarly, III (14 ml.), 8.5 ml. 38% HCHO, 8.2 g. NHMe2.HCl, and 30 ml. 50% alc. stirred 3 hrs. at 55-60°, concentrated and diluted with H2O, extracted with Et2O (to remove 3.2 g. III), the aqueous phase treated with 30 g. Na2CO3 and extracted with Et2O, the extract evaporated and the product distilled gave 7.6 g. IV (R = Me) (IVa), b0.1 103-8°; monopicrate, m. 149-50° (from EtCOMe); di-HCl salt, m. 168-71° (from EtOH-Et2O); mono-MeI salt, m. 220° (decomposition). Heating a similar mixture containing pyrrolidine 5 hrs. at 60 ° and recovering 30% III gave 44% IV (R2 = [CH2]4) (IVb), b0.07 122-30°; monopicrate, m. 138-9° (from EtCOMe); di-HCl salt, m. 174-5° (from absolute alc.). IV (R2 = [CH2]5) (IVc), m. 80-1° gave a di-HCl salt, m. 152-4° (from iso-PrOH). Equimolar amts. of the appropriate amine HCl salt and 6-chlorolepidine (V) heated with 10% excess 38% HCHO in 50% alc. under the stated conditions, the alc. evaporated in vacuo and the mixture diluted with H2O, the aqueous solution basified, extracted with Et2O and the product distilled gave the following 6,4-Cl(R2NCH2CH2)C9H5N (R2, time of heating in hrs., temperature, % V recovered, % yield, b.p., salts, m.p. (solvent) given): Me2, 4, 65-70°, 40, 40, b0.1 111-12°; monopicrate m. 172-3° (from EtCOMe), di-HCl salt 172-3° (decomposition) (from EtOH), mono-MeI salt 200° (decomposition) (from

MeOH); Et2, 2, 100°, 50, 23, b0.1 120°, monopicrate 138-9° (from EtOH), di-HCl salt 150-3° (from MeNO2) mono-MeI salt 143-4° (from EtOH); (CH2)5, 4.5, 65-70°, 39, 25, b0.1 146-7°, monopicrate 135-7° (from alc.), di-HCl salt 167-9° (from alc.), mono-MeI salt 123-4° (from alc.). By procedures similar to those used for the 6-chloro compds., 6,4-MeO(R2NCH2CH2)C9H5N compds. (VI) were prepared from 6-methoxylepidine (VII) hydrate. The dimethylamino- and piperidinoethyl compds. could not be purified by distillation and addition of ligroine to the distillate gave a small amount of 4-(2-hydroxyethyl)-6- methoxyquinoline, m. 125-7° (from H2O). The following VI were prepared (R, % VII recovered, % yield, b.p., salt, m.p. (solvent) given): Me2, 37, 32 (crude), b0.08 115-27°, di-HCl salt 172-5° (MeOH-EtOAc), mono-MeI salt 140° (decomposition) (from MeOH); Et2, -, 42 (pure), b0.08 128°, monopicrate 129-31° (from alc.), di-HCl salt 154-6° (from iso-PrOH), mono-MeI salt 121-3° (from alc.); [CH2]5, 51, 26 (crude), b0.1 137-57°, di-HCl salt 182-4° (EtOH-Et2O). Treatment of 8-quinolylacetic acid with CH2N2 in Et2O gave the Me ester (VIII), b0.1 107°; picrate, m. 184-5 ° (from EtCOMe). VIII (25.5 g.) and 200 ml. 33% NHMe2 in MeOH autoclaved 16 hrs. at 115° and 4 hrs. at 150°, the mixture concentrated in vacuo and distilled gave 19.8 g. N,N-dimethyl-8-quinolylacetamide (IX), b0.1 143-4° (after redistn.); picrate, m. 141-2° (from Me2CO). VIII (19.5 g.) was autoclaved in 200 ml. NHEt2 30 hrs. at 200°, evaporated in vacuo, and the residue distilled to give 2.7 g. 8-methylquinoline (picrate, m. 202-4°) as forerun and 14.5 g. N,N-diethyl-8-quinolylacetamide (X), b0.04 141-2°, m. 67-8° (from absolute Et2O); picrate, m. 146° (from EtCOMe). IX (12 g.) in 175 ml. absolute Et2O stirred in 1 hr. into 10 g. LiAlH4 in Et2O and the mixture refluxed 3 hrs., cooled and treated with 10 ml. H2O followed by 30 ml. 5% NaOH, filtered and the residue extracted with hot Et2O, the dried exts. evaporated and the residue distilled gave 7.9 g. 8-(2-dimethylaminoethyl)- quinoline, b0.05 98-9°; monopicrate, m. 156-7° (from Me2CO); di-HCl salt, m. 177-8° (from alc.); mono-MeI salt, m. 197-8° (decomposition) (from MeOH). X (11.8 g.) reduced as above gave 10.4 g. 8-(2-diethylaminoethyl)quinoline, b0.01 105-6°; monopicrate, m. 125° (from EtCOMe); mono-MeI salt, m. 134°. Quinoline-6-carboxylic acid (30 g.) and 100 ml. SOCl2 refluxed 1 hr. and evaporated in vacuo, the residue taken up in 100 ml. C6H6, cooled and gradually treated with 70 ml. NHEt2, the mixture refluxed 1 hr. and cooled overnight, poured into H2O and the aqueous phase extracted with Et2O, the combined extract and organic phase dried and distilled gave 18.4 g. N,N-diethylquinoline-6-carboxamide (XI), b0.1 138-46°; picrate, m. 207-8° (from alc.). Reduction of 11.8 g. XI with 7 g. LiAlH4 in Et2O gave 4.7 g. 6-diethylaminomethylquinoline, b0.07 88° (on redistn.); di-HCl salt, m. 239-41° (decomposition) (from alc.). NHMe2 (7 g.) and 15 g. 8-bromomethylquinoline (XII) in 100 ml. PhMe kept 41 hrs. over 15 g. K2CO3, filtered and distilled gave 10.3 g. 8-(R2NCH2)C9H6N (XIII) (R = Me), b0.1 80°; di-HCl salt, m. 238-40°; mono-MeI salt, m. 108-10° (from alc.). Similarly were prepared the following XIII (R2 given): Et2, b0.1 100°, di-HCl salt m. 200-2° (from alc.), mono-MeI salt 166-8° (from alc.); [CH2]5 (69%), b0.04 118-22°, di-HCl salt 221-2° (decomposition) (from alc.), mono-MeI salt 169-70° (from alc.).

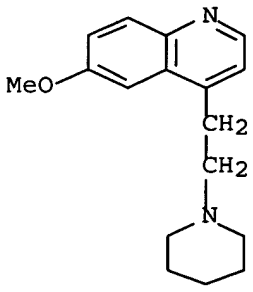
Controlled or Index Terms

101602-58-8, Quinoline, 6-methoxy-4-(2-piperidinoethyl)-
(preparation of)

Hit Structure

CAS Registry Number
101602-58-8 CA

Chemical or Trade Name
Quinoline, 6-methoxy-4-(2-piperidinoethyl)- (6CI) (CA INDEX NAME)



Original Reference
51:17917i,17918a-i,17919a-f

L12 ANSWER 60 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

42:21383 CA Full-text

Title

Series of 4-substituted quinolines

Author/Inventor

Cornforth, J. W.; Cornforth, R. H.

Patent Assignee/Corporate Source

Oxford Univ., UK

Source

Journal of the Chemical Society (1948) 93-7 CODEN: JCSOA9; ISSN: 0368-1769

Document Type

Journal

Language

Unavailable

Other Source

CASREACT 42:21383

Abstract

cf. Campbell, et al., C.A. 41, 7206.9. Et quininate (I) (82 g.), 40 g. EtCO2Et, 20 g. NaNH2, and 120 cc. C6H6, refluxed 70 hrs. and the crude keto ester heated 2 hrs. with 250 cc. 25% H2SO4 on the steam bath, give 75% 6-methoxy-4-propionylquinoline (II) (on basis of unrecovered I). p-MeOC6H4NH2 (9.1 g.), 13 g. SnCl2.2H2O, and 10 cc. EtOH, heated 1.5 hrs. on the steam bath while 5 g. PrCOCH2CH2Cl is added, the mixture refluxed 8 hrs., made alkaline, and the ether-soluble product (5.2 g., b10 145-200°) warmed 15 min. with 5 cc. Ac2O, give 6-methoxy-4-propylquinoline (IIA), b10 194-200°, m. 56-7°; when the base is liberated with Na2CO3, there results a carbonate(?), m. 97°; picrate, yellow, m. 196-7°; oxidation with SeO2 or condensation with BzH or Cl3CCHO gave indefinite results. IIA (24 g.) in 24% HBr, treated with the calculated quantity of Br in an air stream or in HBr, gives 39 g. 6-methoxy-4-(α-bromopropionyl)quinoline-HBr (III), pale yellow, m. 192-3° decomposition); some HBr is lost on drying. III (1.9 g.) and 1.25 g. piperidine in 5 cc. ether, allowed to stand 1 hr. and the residue taken up in 100 cc. Me2CO containing 2.8 g. picrolonic acid (IV), give the 4-[α-(1-piperidyl)-propionyl] analog as the dipicrolonate (V), with 1 mol. Me2CO, orange-red, decompose about 160-70°. V (2.7 g.), ground with 10 cc. 5 N HCl, the IV washed with 15 cc. 5 N HCl, and the free base (isolated with alkali and ether) in 50 cc. N HCl hydrogenated at room temperature over Pt oxide, gives 6-methoxy-4-[1-hydroxy-2-(1-piperidyl)- propyl]quinoline (VI), m. 118-19° (isolated as the picrolonate); the di-HCl salt m. 137-8° (decomposition); 7.8 g. V yields 1.35 g. VI. III (5 g.) and 5.5 g. Bu2NH in 10 cc. Me2CO, kept 1 hr. at room temperature and 45 min. at 45°, give 6.8 g. of the orange dipicrolonate of the keto base (VII); catalytic reduction of VII in acid solution gives I (picrate, yellow, m. 174-5°); reduction of VII over Pt in the presence of FeSO4 in acid or neutral solution gives (6-methoxy-4-quinolyl)ethylcarbinol (VIII), m. 102° (HCl salt, m. 224° (decomposition); picrate, deep yellow, m. 178°); reduction of VII with Zn in cold AcOH gives VIII; Al-Hg in faintly acid solution gives II; Na-Hg in weakly acid solution gives I; (iso-PrO) 3Al in iso-PrOH gives an intractable product. The work was discontinued before these results were explained. I (3.15 g.) and 1.8 g. iso-AmNO2, added to 0.35 g. Na in 8 cc. EtOH, the mixture kept 2 days at 0 °, the aqueous solution treated with 4.5 cc. 20% AcOH, and the gelatinous solid crystallized from 300 cc. EtOH, give 2 g. iso-nitroso-6- methoxy-4-quinolyl Et ketone, m. 228°; reduction with SnCl2 in HCl gives VIII. 6-Methoxylepidine (IX) (11.5 g.), 12 cc. AcOH, 50 mg. quinol, and 5 drops AcOH, heated 14 hrs. at 200°, give 3.8 g. (crude) 6-methoxy-4-propenylquinoline, b0.25 118-24° (analyzed as the picrate, yellow, m. 211-12° (decomposition)); no useful product could be isolated from its oxidation with BzO2H. IX (3.46 g.) in 12 cc. AcOEt at -5°, treated with 73 cc. of a solution of 14.6 g. BzO2H in 350 cc. AcOEt and kept 20 hrs. at 0°, give the oxide, m. 151-2°, clears 156-7° (picrate, yellow, m. 171-2°); it is not reduced by SO2 in CHCl3 or by H over Pd-SrCO3 but gives IX with Zn and AcOH. 6-Methoxy-4-styrylquinoline yields a N-oxide, yellow, m. 160-2° (picrate, m. 211°). IX (27 g.) and 27 g. Cl3CCHO in 60 cc. C5H5N, heated 7 hrs. on the steam bath, give 34.2 g. 6-methoxy-4-(3,3,3-trichloro-2-hydroxypropyl)quinoline (X), m. 195-6°; 12 g. X, added (0.5 hr.) to 10.5 g. KOH in 50 cc. boiling EtOH and refluxed 2 hrs., gives 6.2 g. 6-methoxy-4-quinolineacrylic acid (XI), pale yellow, m. 270° (decomposition); 5 g. XI in 30 cc. saturated AcOH-HBr, saturated at 0° with HBr, the

solution allowed to stand 2 days, and the residue added to excess boiling saturated K2CO3 covered with xylene, gives a poor yield of 6-methoxy-4-vinylquinoline, analyzed as the picrate, m. 210°. X is not affected by SnCl2 in Me2CO; reduction with Zn in EtOH-AcOH gives a little II. IX (21.6 g.), added to PhLi (1.72 g. Li and 20 g. PhBr in 130 cc. ether), followed by AcH in ether until the red color is discharged, gives 6-methoxy-2-phenyl-4-methylquinoline, m. 128°. 1,2,6-Br(MeO)C10H5COCH2Br (7.16 g.) and 5.16 g. Bu2NH in 40 cc. ether, refluxed 5 hrs., and the residue reduced with (iso-PrO)3Al, gives 2.3 g. of the dipicrate of 1-bromo-2-methoxy-6-(2-dibutylamino-1-hydroxyethyl) naphthalene, orange, m. 147-8°. PhCH2NH2 (35.7 g.), 100 g. AmBr, and 44 g. KOH, refluxed 10 hrs., give 6 g. benzylamylamine, b10 122-4° (HCl salt, m. 240°), and 40.7 g. benzyldiamylamine, b10 151-2°.

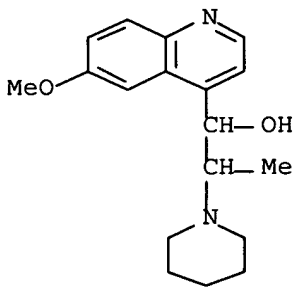
Controlled or Index Terms

806614-11-9, 4-Quinolinemethanol, 6-methoxy-α-1-piperidinoethyl-
(preparation of)

Hit Structure

CAS Registry Number
806614-11-9 CA

Chemical or Trade Name
4-Quinolinemethanol, 6-methoxy-α-[1-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)



Original Reference
42:4588f-i,4589a-g

L12 ANSWER 61 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
40:34388 CA Full-text

Title
Synthetic substitutes for quinidine

Author/Inventor
Dawes, G. S.

Patent Assignee/Corporate Source
Dept. of Pharmacol., Oxford

Source
British Journal of Pharmacology and Chemotherapy (1946), 1, 90-111 CODEN: BJPCAL; ISSN: 0366-0826

Document Type
Journal

Language
Unavailable

Abstract

cf. C.A. 40, 2587.8. The activity of the drugs was measured by using the isolated auricles of the rabbit stimulated at any desired speed by break shocks from an induction coil with a rotary contact breaker. The maximal rate at which the auricles were able to respond was recorded and the method based on the observation that the maximal rate is reduced by quinidine. In the following compds. which were tested R = hydroxy-(6-methoxy4-quinolyl)methyl, R' = 1-piperidyl. α-Methyl-6-R-3-quinuclidinemethanol-2HBr, 6-R-3-quinuclidinemethanol- 2HBr, 2-R-piperidine-HCl, decahydro-2-(R-methyl)isoquinoline-2HCl, 4-propyl-1-(R-methyl)-piperidine-2HCl, 4-(R-methyl)morpholine-2HCl, 1-(R-methyl)-4,4'-bipiperidine-3HCl, 3-propyl-4-(2-R-ethyl)-piperidine- HNO3, 1-R-butylamine-HBr, N-(R-methyl)-diethylamine-2HCl, N-(R-methyl)dibutylamine-2HCl, N-(R-methyl)-diamylamine-2HCl, 2-hydroxy-2-(4-quinolyl)triethylamine-2HCl, RCH2R', α-(7-methoxy- α -naphthyl)-1-piperidineethanol-HCl, α-(α-naphthyl)-1- piperidineethanol-HCl, α-(4-biphenylyl)-1-piperidineethanol-HCl, α-phenyl-1-piperidineethanol-HCl, α-hendecyl-1- piperidineethanol-HCl, α-diethylaminoacetophenone-HBr, α-1-piperidylacetophenone-HBr, 2-dimethylaminoethyl diphenylglycolate-HCl, 2-diethylaminoethyl diphenylglycolate-HCl, diisopropylaminomethyl diphenylglycolate-HCl, 2-(1-piperidyl)ethyl diphenylglycolate(I)-HCl, 1,2,2,6-tetramethyl-4-piperidyl diphenylglycolate-HCl, α-(1-naphthoxymethyl)-1-piperidineethanol- HCl, (C6H4CHOHCH2R')2-2HCl, α,α'-bis(phenoxymethyl)-1,4-piperazinediethanol-2HCl, α,α'-bis(cyclohexyloxymethyl)-1,4- piperazinediethanol-2HCl, α,α'-bis(octyloxymethyl)-1,4- piperazinediethanol-2HCl quinidine-2H2O, quinidine-2HCl, cocaine-HCl, procaine-HCl, butethanol-HCl (p-BuNHC6H4CO2CH2CH2NMe2), butyn, syntropan-H3PO4, trasentin-HCl, pethidine-HCl, phenacaine-HCl, papaverine-HCl, and sparteine-H2SO4. The most promising of this group was I, being 5.4 times as active as quinidine and having a therapeutic efficiency index from 3 to 6 times that of quinidine according to whether mouse toxicities are compared after i.v. or i.p. injection. The most active compds. have aromatic and basic groups joined by ester, ether, keto or carbinol linkages. Within limits increase in lipoid solubility and increase in size of the alkyl group attached to the basic N atom are associated with increased activity. Since the best local anesthetics have the greatest quinidinelike activity, it is suggested that the active component is the free base rather than the cation. Curariform and atropinelike properties appear to be characteristic of the cation.

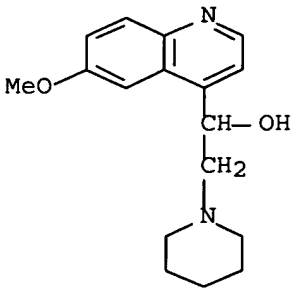
Controlled or Index Terms

63867-83-4, 4-Quinolinemethanol, 6-methoxy-α-1-piperidylmethyl-, -HCl
(preparation of)

Hit Structure

CAS Registry Number
63867-83-4 CA

Chemical or Trade Name
4-Quinolinemethanol, 6-methoxy-α-(1-piperidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

Original Reference
40:6662a-g

L12 ANSWER 62 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
40:8418 CA Full-text
Title
6'-Methoxy-8-oximino-3-propylrubatoxanone
Author/Inventor
Koelsch, C. F.
Patent Assignee/Corporate Source
Univ. Minnesota, Minneapolis
Source
Journal of the American Chemical Society (1946), 68, 146-7 CODEN: JACSAT; ISSN: 0002-7863
Document Type
Journal
Language
Unavailable
Graphics
For diagram(s), see printed CA Issue.
Abstract
These expts. were carried out as models for part of a projected synthesis of quinine. CH2(CO2Et)2 (320 g.) and MeOCH2CH:CHCN, added to a solution of 46 g. Na in 550 ml. EtOH, and the mixture refluxed 90 min., treated with 25 g. NaI and 160 g. CH2:CHCH2I, and refluxed an addnl. 90 min., give 70% of 4,4-dicarbethoxy-3-methoxymethyl-6-heptenenitrile (I), b19 192-5°. I (420 g.) in 100 ml. EtOH, reduced with H at 2200 lb. and 150° (Raney Ni) for 3.5 hrs., the sirupy product boiled for 20 hrs. with 180 g. KOH in 3500 ml. H2O, the unsapond. part (65 g.) removed with ether, the aqueous solution concentrated to 750 ml., acidified with H2SO4, filtered, extracted with 5 100-ml. portions of ether, and the thick sirup (188 g.) heated at 185°, gives 95 g. of 4-methoxymethyl-3-propyl-2- piperidone (II), b6 175-80°. II (100 g.) in 1 l. BuOH, treated with 100 g. Na, gives 43 g. of basic and 37 g. of neutral material; the basic material gave no definite fraction. The basic fraction, purified through the picrate (yellow, m. 112-16°), gives 12.6 g. of 4-methoxymethyl-3-propylpiperidine (III), b26 118-22°; picrolonate, yellow, m. 184-5°. III (12.5 g.) and 125 g. 51% HBr, boiled 6 hrs., give 22 g. of 4-bromomethyl-3-propylpiperidine-HBr (IV), a pale brown sirup; steam distillation from excess dilute NaOH gives 3-propyl-1-azabicyclo[2.2.1]heptane, oil with sweet fishy odor (picrate, bright yellow, m. 129-30°; picrolonate, pale yellow-brown, m. 204-5°). IV (21.5 g.) in 25 ml. H2O containing a little HBr, treated with 6 g. NaNO2, gives 16.6 g. of crude NO compound, which, reacted with CHNa(CO2Et)2 and hydrolyzed, gives 11.8 g. of (1-nitroso-3-propyl-4-piperidylmethyl)malonic acid, which could not be crystallized even after purification through the Ca salt (with 1.5 mols. H2O); heating at 150° gives 1-nitroso-

3-propyl-4-piperidinepropionic acid (V), m. 106°; Me ester (VI), b7, 195-7°. V and CuCl in concentrated HCl give 3-propyl-4-piperidinepropionic acid, m. 247° (effervescence). VI (5.5 g.) and 5.6 g. of Et quininate and EtONa (1 g. Na) in 25 ml. ether, heated at 40° in a closed vessel for 40 hrs. and allowed to stand at room temperature for 2 days, give a brown oil which, boiled 1 hr. with HCl, gives the compound C21H27N3O3 (VII), as the di-HCl salt, decomps. above 245°; monoacetate, m. 198° (decomposition).

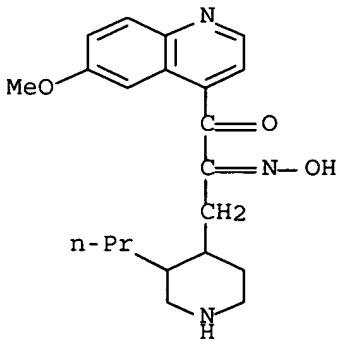
Controlled or Index Terms

854652-78-1, 1,2-Propanedione, 1-(6-methoxy-4-quinolyl)-3-(3-propyl-4-piperidyl)-, 2-oxime
(salts)

Hit Structure

CAS Registry Number
854652-78-1 CA

Chemical or Trade Name
1,2-Propanedione, 1-(6-methoxy-4-quinolyl)-3-(3-propyl-4-piperidyl)-, 2-oxime (4CI) (CA INDEX NAME)



Original Reference
40:1513b-h

L12 ANSWER 63 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
39:19067 CA Full-text

Title
Total synthesis of quinine

Author/Inventor
Woodward, R. B.; Doering, W. E.

Source
Journal of the American Chemical Society (1945), 67, 860-74 CODEN: JACSAT; ISSN: 0002-7863

Document Type
Journal

Language
Unavailable

Other Source
CASREACT 39:19067

Graphics
For diagram(s), see printed CA Issue.

Abstract

cf. C.A. 38, 3658.9. A brief history is given of earlier attempts to synthesize quinine. Details are given of the preparation of aminoacetal (I) in 72.5% yield and of m-HOC6H4CHO (II) in 59-64% yields. I (80 g.) and 70 g. II, warmed 0.5 hr. on the steam bath, give 94% of m-HOC6H4CH:NCH2CH(OEt)2 (III). Rapid solution of 50 g. of III in 118 cc. 76% H2SO4 (previously cooled to 0°) and the solution allowed to stand 12 hrs. at 3° and 36 hrs. at room temperature, poured onto 700 g. ice, neutralized with NH4OH, and buffered with Na2CO3, and the crude product sublimed at 160°/2 mm. and crystallized from 95% EtOH (36 g. for 10 g. of IV), gives 64% of 7-hydroxyisoquinoline (IV), pale yellow, m. 229.5-30.5°; IV may be purified through the Na salt. IV was prepared also (64% yield) by heating 10 g. of II and 11.4 g. of I on the steam bath for 0.5 hr., the product dissolved in C6H6, the H2O removed, the cooled C6H6 solution (20-30 cc.) treated with 25 cc. 80% H2SO4 (previously cooled to 0°), and the solution allowed to stand overnight at 3-5° and for 24 hrs. at room temperature; with 72% H2SO4 the yield was 30%; 76% H2SO4, 43%; 78% H2SO4, 59%; 82% H2SO4, 44%; 84% H2SO4, 31%; however, with large runs (100 g. II), 82% H2SO4 gives 60% of IV. The mother liquor from the Na salt of IV gives about 5% of the 5-isomer, m. 231-3°. The acetates of the 2 isomers are not stable on standing for long periods and are hydrolyzed readily by shaking with aqueous 2 N NaOH. IV (6 g.) and 3.5 g. piperidine in 30 cc. 95% EtOH, treated with 3.7 g. of 35% aqueous HCHO, heated for 6 hrs. on the steam bath, the solvent removed, and the ethereal solution of the dark red oil diluted with petr. ether, give 11% of 7-hydroxy-8- piperidinomethylisoquinoline (V), m. 81.5-2.5°, on the 1st crystallization; the mother liquors, purified through the yellow Na salt, raise the yield to 61%. V is very resistant to reduction over Pt in a variety of solvents; long-continued reduction gives a compound C20H24O2N2, m. 155.5-6.5° [probably sym-bis(7-hydroxy-1,2,3,4-tetrahydro-8- isoquinolyl)ethane], and a nonphenolic, strongly basic oil which yields a carbonate, m. 103-10° (decomposition). V (0.45 g.) in 10 cc. C10H7Me, boiled for 22 hrs. over 0.07 g. of 30% Pd-charcoal, gives a small amount of 7-hydroxy-8-methylisoquinoline (VI), light yellow, m. 232-3.5°; this method is of theoretical interest but of no practical importance. V (10 g.) in 50 cc. absolute MeOH, treated with 12 g. Na in 100 cc. absolute MeOH and heated 16 hrs. at 220°, gives 65% of VI, purified by sublimation at 160°/2 mm. It is not necessary to isolate V and details are given of the preparation in 63% yield of VI from IV, piperidine, and HCHO, followed by the reductive cleavage reaction; IV is separated by the formation of the alc.-soluble Ba salt. In the last method bis(7-hydroxy-8-isoquinolyl)methane is formed, characterized by the canary-yellow sulfate; cleavage with MeONa-MeOH gives 29% of VI. Oxidation of VI with Cr2O3 in AcOH (standing overnight at room temperature and heating 1 day at 45°) gives a quinol, yellow, m. 135.5-6.5°; VI (1 g.) and AcO2H give 90 mg. of the 2-oxide, m. 256-7° (decomposition); sublimation gives VI. Catalytic reduction (Pt oxide) of 1.6 g. of VI in 100 cc. AcOH (1 hr.) gives 1.1 g. of the 1,2,3,4-tetrahydro derivative (VIII), m. 248-50°; VII results in 0.11-g. yield from 1 g. of VI on reduction with Sn in 5 N HCl (boiling 2 hrs.) and in 45% yield by reduction of 4 g. of VI in 20 cc. absolute EtOH over 2 g. Raney Ni at 130° and 3700-lb. H pressure. VII (1 g.) in 10 cc. MeOH and 0.7 cc. Ac2O give 1.04 g. of the 2-Ac derivative (VIII), m. 187-98°; this was prepared also in 95% yield without isolation of VII from the hydrogenation reaction; the spread in m.p. may be caused by a gradual establishment of an equilibrium with the O-Ac derivative at the elevated temperature VIII (4 g.) in 50 cc. AcOH, shaken with H at 60-lb. pressure over 5 g. of (relatively inactive) Pt oxide for 16 hrs., the residual oil treated with 5 cc. of 2 N HCl and extracted with ether, the residue from the ether extract (3.75 g.) boiled 3 hrs. with 25 cc. of 2 N HCl, the solution made basic and extracted with ether, gives 70% of 8-methyldecahydroisoquinoline (IX), b12 100°; the hemihydrate m. 41-3° (from 1-2 vols. ether at -10° or a larger volume at -70°); IX was purified through the bicarbonate, m. 78-84° (decomposition). IX was unchanged after treatment with CrO3 in AcOH for 24 hrs. The above ether-extracted HCl solution was basified and extracted with ether, giving 0.46 g. of trans-2-acetyl-7-hydroxy-8- methyldecahydroisoquinoline (X), m. 126-8°. Similar reductions with fresh active Pt oxide were complete in 3 hrs. In EtOH no reduction took place until a small amount of concentrated HCl was added, when slow hydrogenation occurred. VIII (1.63 g.) in 10 cc. absolute EtOH shaken with H at 3000-lb. pressure at 150° (Raney Ni) for 16 hrs. gives a mixture of isomers of X, from which about 50% of the trans-isomer crystallizes. Hydrolysis of the mixture of X by 2 N NaOH (boiling 80 min.) gives a 7-hydroxy-8-methyldecahydroisoquinoline, m. 130-2°. Catalytic reduction of 40 g. of VIII in 400 cc. absolute EtOH at 3000-lb. pressure and 160° for 12-18 hrs., the viscous mixture of crude X taken up in 280 cc. glacial AcOH and oxidized (in 8 portions) with 34 g. CrO3 for each portion (0.0597 g./cc. in 1:4 H2O-AcOH) for 2-3 hrs. at 0°, 12 hrs. at room temperature, and 1 hr. at 50°, the AcOH removed in vacuo, the residue dissolved in 15 cc. hot MeOH and extracted with 2 1-l. portions of ether, boiled to coagulate the Cr salts, filtered, and the dark green oil distilled in vacuo and the fractions (34 g.) crystallized from ether containing H2O, give 30% (based on VIII) of cis-2-acetyl-7-keto-8-

methyldecahydroisoquinoline hydrate (XI), m. 80.5-2.5°; the anhydrous ketone is an oil. The oily cis-X gives 70% of XI; trans-X gives trans-XI, which does not form a crystalline hydrate. Anhydrous XI (from 19 g. of hydrate) in 100 cc. anhydrous EtOH at 0°, treated with 1.94 g. Na in anhydrous EtOH, the volume brought to 300 cc. with anhydrous EtOH, 7.25 cc. anhydrous EtNO2 added, the solution kept at 3-5° for 18 hrs., and then treated with CO2 for 3-4 hrs., gives 78% of 1-acetyl-10- oximinodihydrohomomeroquinene Et ester, EtO2CCH2CH2C4H.CH2.CH2.NAc.CH2.C3H C(:NOH)Me (XII), m. 107.5-8.5°; a labile form m. 96-8°; the average yield for a series of 8 runs was 68% (58 to 76%). Catalytic reduction of XII gives the NH2 derivative, which was not isolated and must be handled with care since heat causes changes which render the material useless for further synthetic work; hydrolysis with 20% aqueous NaOH or with 1:1 aqueous HCl gives small quantities of a 10-aminodihydrohomomeroquinene dihydrate, m. 186.5-8°. Catalytic reduction of 5 g. of XII in 150 cc. AcOH with 1-1.5 g. Pt oxide at 1-3 atmospheric for 20-40 hrs., the solvent removed in vacuo at room temperature, the residue taken up in 250 cc. absolute EtOH and refluxed 48 hrs. with 50 g. anhydrous K2CO3 and 50 g. MeI (further addition of 25-50 g. MeI and K2CO3 at intervals), give 91% of 1-acetyl-10- trimethylammoniumdihydrohomomeroquinene Et ester iodide (XIII), a glass; with Ag2O or dilute alkali XIII is rapidly converted to the stable betaine; with 60% NaOH or KOH, vigorous evolution of Me3N commences at 140°, with simultaneous hydrolysis of the ester group and the amide link, giving dl-cis-homomeroquinene (XIV), m. 219-20° (decomposition). If the reaction product with NaOH or KOH is treated with KCNO there results 38% of the N-carbamyl derivative (XV), m. 165.2-5.8° (decomposition); cinchonidine salt, m. 155-7°. XV (81 mg.) in 13 cc. 0.1 N HCl, refluxed 34 hrs. and the solution shaken with 0.21 g. Ag2O, gives 100% of XIV. Dibenzoyl-d-tartrate of XIV, m. 166-8°. For synthetic purposes the crude HCl salts of XV, directly from the cleavage reaction, were treated with dilute EtOH-HCl and the Et ester benzoylated in CHCl3, giving 96.3% of N-benzoylhomomeroquinene Et ester (XVI), a heavy viscous liquid purified by mol. distillation XVI (2.7 g.) and 4 g. Et quininate, heated with 1.4 g. anhydrous EtONa at 80-2° for 14 hrs. (continuous stirring), give 63.4% of Et N- benzoylquinotoxinecarboxylate, an alkali-soluble oil; hydrolysis with 1:1 aqueous HCl (refluxing 4 hrs.) gives 50% of crude dl-quinotoxine (XVIII) as a reddish viscous oil. XVII could not be resolved by d-tartaric acid. Fractional crystallization from MeOH (32 steps) gives 11% (based on XVI) of d-quinotoxine (XVIII) di-benzoyl-d-tartrate, m. 185.5-6°; the regenerated XVIII is a very pale yellow oil, [α]D 44° (EtOH). The acid d-tartrate of XVIII m. 150-3°, and forms a hexahydrate, m. 55-63°. Tartaric acid is readily resolvable by the use of XVIII. In view of the established conversion of XVIII to quinine (Rabe and Kindler, C.A. 12, 2565), with the synthesis of XVIII the total synthesis of quinine is complete.

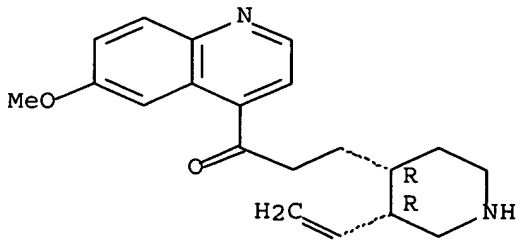
Controlled or Index Terms

84-55-9, Quinicine, d-
(and derivs.)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

39:3002c-i,3003a-i,3004a-c

L12 ANSWER 64 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

38:31216 CA Full-text

Title

Synthetic experiments in the series of the cinchona alkaloids. IV. Homomeroquinene and the partial synthesis of quinotoxine

Author/Inventor

Prostenik, M.; Prelog, V.

Source

Helvetica Chimica Acta (1943), 26, 1965-71 CODEN: HCACAV; ISSN: 0018-019X

Document Type

Journal

Language

Unavailable

Abstract

C. A. 37, 133.3. Homomeroquinene (3-vinyl-4-piperidinepropionic acid) (I), previously not described (cf. C. A. 38, 3658.9), is an important intermediate for the total synthesis of cinchona alkaloids. It has 2 asym. C atoms and consequently may exist in 4 stereoisomeric forms. Its preparation from natural cinchonine, carefully purified from dihydro alkaloids, was undertaken. Com. cinchonine (containing 85.7% of vinyl base) (50 g.) in 500 cc. of dilute H2SO4 was warmed at 40-50° for 4 hrs. with 500 cc. of 10% Hg(OAc)2 in 5% AcOH. The dihydro base was precipitated with an excess of 25% NH4OH and filtered off. The filtrate was acidified and heated for several hrs. with 20 g. H2PO3. The precipitated Hg salt was filtered off and the purified product was precipitated with NH4OH, yielding 41.0 g. of pure cinchonine (containing 99.8% vinyl base). The purified cinchonine (50 g.) was heated at 140° with stirring in 24 cc. of 50% H2SO4 for 2 hrs. The product was taken up in 500 cc. of hot H2O, precipitated with NaOH and extracted with ether, yielding 49 g. of thick yellow oily cinchotoxine, converted by benzoylation and treatment with HONH2 into 59.5 g. of N-benzoylcinchotoxine oxime (II), m. 65-95°. II (59.5 g.) in 360 cc. of 5% NaOH was stirred with 28.12 g. p-MeC6H4SO2Cl. The solid product was taken up in CHCl3, washed with NaOH and H2O, and evaporated, yielding 59.5 g. of yellow product which was refluxed for 48 hrs. in 100 cc. MeOH and 50 cc. H2O containing 70 g. KOH. The saponification mixture was steam-distilled and shaken out with CHCl3. After acidification and extraction of the BzH with ether, the aqueous layer was evaporated and the dry residue was extracted with alc. The alc.-soluble portion was esterified with 4% HCl in alc.; after evaporation of the alc. the crude HCl salt was neutralized with concentrated K2CO3 and the free ester was extracted with ether, yielding 4.42 g. of I Et ester, b0.1 102-4°, [α]18D 42.2° (c 6.11 in absolute alc.); chloroaurate, m. 110.5-12.0° (decomposition); N-Bz derivative (III), b0.1 190-4°. The ester was refluxed with dilute HCl and the residue on evaporation was taken up in H2O and shaken with Ag2O. The filtrate was heated with H2S, filtered and evaporated The crystalline product was recrystd. from MeOH-acetone, yielding colorless tablets of I, m. 211-12° (decomposition), [α]20D 50.4° (c 1.906 in H2O); dibenzoyl-d-tartrate, m. 186° (decomposition); reineckate, red leaflets, m. 131.5-2.0°. N-Methylcinchotoxine oxime (10.79 g.), prepared through the cinchonine MeI salt from 15 g. cinchonine in 70 cc. NaOH was treated with 4.9 g. of p-MeC6H4SO2Cl. The amide mixture was saponified with KOH in MeOH and the product was converted into oily N-methylhomomeroquinene Et ester, b23 135-40°, [α]18.5D 30.3° (c 4.949 in alc.). III (10.2 g.) and 9.71 g. Et quininate were condensed in the presence of EtONa (from 1.77 g. Na) by stirring for 15 hrs. at 80-90°. The reaction product was decomposed with iced H2O and the neutral portion shaken out with benzene. The aqueous layer was acidified with 10% H2SO4 and extracted with ether to yield 9.58 g. (59%) of oily β-keto acid ester. Saponification by refluxing for 4 hrs. with 100 cc. HCl (1:1), extraction of the BzH with ether, neutralization with NaOH and extraction with ether gave 3.98 g. (64%) of yellow oily synthetic quinotoxine; dibenzoyl-d-tartrate, m. 183° (decomposition), [α]20D -16.0° (c 1.002 in alc.-CHCl3 (1:2)), [α]20D -15.9° (c 1.008 in alc.-CHCl3 (1:2) for product prepared from natural quinine); dipicrolonate, m. 210° (decomposition); synthetic benzoylquinotoxine oxime, m. 65-95°.

Controlled or Index Terms

84-55-9, Quinicine
(and derivs.)

Hit Structure

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84-55-9 CA

Chemical or Trade Name
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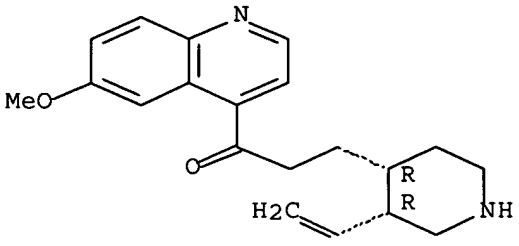


Stereochemistry
Absolute stereochemistry.
Original Reference
38:4602b-i,4603a

L12 ANSWER 65 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
38:25018 CA Full-text
Title
Strychnos alkaloids. CXVIII. Transformations of isostrychnine I and of isostrychnic acid
Author/Inventor
Leuchs, Hermann; Schulte, Henda
Source
Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1943), 76B, 1038-43
CODEN: BDCBAD; ISSN: 0365-9488
Document Type
Journal
Language
Unavailable
Abstract
cf. C. A. 38, 1240.8. The statement of Perkin and Robinson (C. A. 23, 3710) and of Siddiqui (C. A. 34, 6295.5) that isostrychnine bases form no benzylidene derivs. is correct only insofar that no normal yellow condensation product is formed; 1 g. isostrychnine (I) boiled 15 min. with 0.5 g. Na in 30 cc. MeOH and 0.8 g. BzH and treated with 40 cc. of 2 N H2SO4 gave 1.5 g. of a colorless sulfate, C28H26O2N2.H2SO4.5H2O; perchlorate, granular, m. 60-70°, loses 7.3% in weight at 20° and 15 mm. and then m. 160-70°. That these are salts of the benzylidene derivative (II) of I is shown by the neg. violet color reaction and the high rotation, [α]20D-655°/d. (approx. 1.6% in CHCl3), of the amorphous free II. Attempts to prepare II directly from the very difficultly soluble benzylidenestrychnine by boiling with NaOPr in PrOH resulted in cleavage of BzH and recovery of about 50% strychnine. With 3% H2O2 on the water bath, I gave the amorphous N-oxide, isolated almost quant. as the perchlorate, needles with 1.5 H2O, m. 149-50°, which with Na2SO3 regenerated I and also gave a difficultly soluble crystalline compound C21H22O2N2SO3. I with BzO2H at 0° likewise gave the N-oxide but another O atom apparently added to the HOCH2CH:C:C2 grouping to give

epoxyisostrychnine N-oxide (1.5-1.9 g. from 3 g. I), seemingly not quite homogeneous prisms losing 4.1% in weight at 100° in a high vacuum, m. 208-9°; epoxyisostrychnine (III), obtained from the N-oxide with H2SO3, apparently also not quite homogeneous, turns brown 235°, m. 250° in vacuo; perchlorate, C21H22O3N2.HClO4.H2O, m. 193-5°; the chlorohydrin, from III in 12 N HCl evaporated in a desiccator and isolated as the perchlorate, C21H23O3N2Cl.HClO4, tables losing 2.8% in weight at 100° and 1 mm., m. 215-17°, gave with NH3 pure III, m. 270° in vacuo, also obtained by boiling the crude III in 0.5 N HBr and treating the resulting HBr salt with NH3. The Oesterlin and Imoudsky (C. A. 37, 5411.7) method of preparing isostrychnic acid (IV) has been further improved by adding 12 g. powdered strychnine to 9 g. NaOH in 180 cc. distilled AmOH at 100° and boiling only 15 min.; this gave 65% crude IV containing no resin (or valeric acids?) and the tedious purification with HCl and NaCl was not necessary; the usual repptn. from dilute H2SO4 with NaOAc gave 50-5% (instead of 35-40%) of a colorless or almost colorless IV, C21H24O3N2.H2O, generally, m. 245-8° (decomposition) in vacuo but sometimes as much as 10° higher and, in open tubes, at 230°; a better criterion of purity was the rotation, [α]20D -151°/d. (2.97% anhydrous IV in 1 mol. of 0.1 N NaOH). According to Siddiqui, IV with Ac2O at 100° gives an "acetoxyisostrychnine," m. 196°. L. and S. obtained an acetylisostrychnic acid, C23H26O4N2.5H2O, m. 100-5° and, anhydrous, 180-5°, easily soluble in NaOH and giving a red color with FeCl3 and only a bluish pink color with CrO3-H2SO4. The statement of the English authors that IV is completely passive toward catalytically activated H is also incorrect. With PtO2 instead of Pd and 2 mols. HCl, IV took up 3 atoms H in 15 min. and, more slowly, a total of about 7 atoms. The product was correspondingly not homogeneous; about 1/3 was isolated as an alkali-insol. base C21H26O2N2, m. 262-4° in vacuo, [α]20D -68.9/d. (2.3% in CHCl3), giving a pos. Otto reaction (perchlorate, m. 250-85°); the other hydrogenation products, which were easily soluble in water and alkalies but not in CHCl3, gave a neg. Otto reaction; they yielded a yellow picrate, C21H32O3N2.1.5C6H3O2N3, losing 4.15-4.3% in weight at 100° and 15 mm., m. 205-13° (210-20° in vacuo).

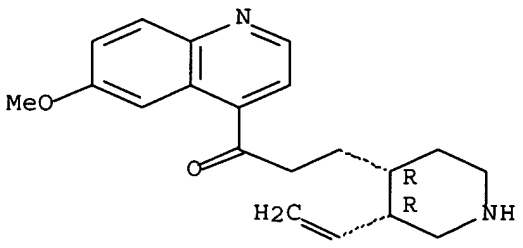
Controlled or Index Terms

84-55-9, Quinicine
(preparation of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

38:3659c-i,3660a-b

L12 ANSWER 66 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

38:25017 CA Full-text

Title

Total synthesis of quinine

Author/Inventor

Woodward, R. B.; Doering, W. E.

Source

Journal of the American Chemical Society (1944), 66, 849 CODEN: JACSAT; ISSN: 0002-7863

Document Type

Journal

Language

Unavailable

Other Source

CASREACT 38:25017

Abstract

7-Hydroxyisoquinoline is converted through its 8-(1-piperidyl-methyl) derivative, m. 81.5-2.5°, into 7-hydroxy-8-methylisoquinoline, m. 232-3.5°; hydrogenation over PtO2 gives 7-hydroxy-8-methyl-1,2,3,4-tetrahydroisoquinoline, m. 246-50°, acetylation of which yields 2-acetyl-7-hydroxy-8-methyl-1,2,3,4-tetrahydroisoquinoline, m. 191-8°. Further hydrogenation over Raney Ni gives a mixture of stereoisomeric 2-acetyl-7-hydroxy-8-methyldecahydroisoquinolines, the cis-isomer of which m. 126-8°; oxidation yields 2-acetyl-7-keto-8-methyldecahydroisoquinolines, the cis form of which, with 1 mol. H2O, m. 80.5-2.5°; EtNO2 and EtONa yield N-acetyl-10-oximinodihydrohomomeroquinene Et ester (labile form, m. 96-8°; stable form, m. 108.5-9°). Reduction of the ester to the amine (characterized as 10-aminodihydrohomomeroquinene dihydrate, m. 186.5-8°), complete methylation by MeI and K2CO3, followed by alkali treatment of the quaternary salt, give dl-homomeroquinene (isolated as the N-uramido derivative, m. 165.2-5.8° (decomposition)); m. 219-20° (decomposition); esterification and benzoylation yield N-benzoylhomomeroquinene Et ester which was condensed with Et quininate to dl-quinotoxine, which was resolved by means of dibenzoyl-d-tartaric acid, the conversion of which to quinine was effected by Rabe (C. A. 12, 2563).

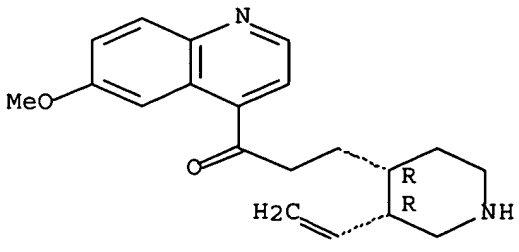
Controlled or Index Terms

84-55-9, Quinicine
(preparation of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference
38:3658i,3659a-c

L12 ANSWER 67 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
37:31442 CA Full-text
Title
Synthetical experiments in the group of sympathomimetics. I. The naphthalene series
Author/Inventor
Rajagopalan, S.
Source
J. Indian Chem. Soc. (1940), 17, 567-72
Document Type
Journal
Language
Unavailable
Abstract
cf. C. A. 35, 7965.2; 36, 1603.7. The synthesis of some naphthalene compds. is described which possess the structure necessary for sympathomimetic activity. 2-Hydroxy-2-(1-naphthyl)ethylamine-HCl prepared by hydrolyzing 1-C10H7CH(OH)CH2NHAc (cf. Pictet and Manevitch, C. A. 7, 1713) with 1:3 HCl and crystallizing from a mixture of alc. and ether, colorless needles, m. 156-7°; picrate, yellow, crystallized from water, decompose 185°. 2-Hydroxy-2-(2-naphthyl)ethylamine-HCl, by hydrolysis of 2-C10H7CH(OH) CH2NHAc (synthesized from 2-acetonaphthone), colorless plates from alc.-ether, decompose 180-3°; picrate, yellow powder from alc., decompose 191-2°. 4-Methoxy-α-piperidino-1-acetonaphthone-HCl, from p-methoxy-α-iodoacetonaphthone and piperidine in dry C6H6 refluxed 1 h., cooled and poured into water, the C6H6 layer washed, dried and treated with dry HCl, colorless needles from alc.-ether, decompose 233-4 °; picrate, stout, yellow rods from AcOH, decompose 150°. Attempts to prepare the corresponding 4-HO compound by demethylation with HCl in a sealed tube produced only a nonbasic tarry material. α-Amino-5-acetoacenaphthone-HCl, from α- iodoacetoacenaphthone (prepared from the Cl ketone, Mayer and Kaufmann, C. A. 14, 2788, and NaI in acetone) and urotropine in CHCl3, allowed to stand overnight, then treated with alc. HCl (Mannich and Hahn, C. A. 5, 3237); picrate, yellow powder from alc., decompose 147-50°. α-Piperidino-5-acetoacenaphthone-HCl, from α-iodo-5- acetoacenaphthone and piperidine, colorless needles from alc.-ether, decompose 235.7°; picrate, yellow plates from AcOH, decompose 152°. 4-Hydroxy-α-amino-1-acetonaphthone-HCl, from 4-methoxynaphthacylphthalimide (Dey and Rajagopalan, C. A. 36, 4510.6) heated with concentrated HCl in a sealed tube for 4 h. at 160-70° and crystallized from alc.-ether, colorless plates, m. 154-5°; picrate, m. 186-7°. Alternate methods consisted of the similar hydrolysis of 4-methoxy-α-(acetyl- or benzoylamino)acetonaphthone. 4-Methoxy-N-acetyl-2-hydroxy-2-(1-naphthyl) ethylamine, obtained by reducing 4-methoxy-α-acetamidoacetonaphthone with Na-Hg, colorless prismatic needles from toluene, m. 155-6°. 2-(1- Naphthyl)ethylamine-HCl, 1-C10H7CH2CH2N(CO)2C6H4 (obtained by refluxing C10H7CH2CH2Br in alc. with K phthalimide at 100° for 8 h., colorless prismatic needles from alc., m. 143°), with concentrated HCl in a sealed tube, decompose 244-5°. N-(2-Bromoethyl)-1-naphthamide, colorless plates from C6H6-petr. ether, m. 94°, and N-(2-bromoethyl)benzenesulfonamide, m. 58°, were prepared by treating the corresponding acid chlorides with BrCH2CH2NH2.HBr in the presence of Na2CO3 solution 4,4'-Dimethoxy-1,1'-binaphthyl, by adding to a cooled solution of 45 g. AlCl3 in 7.5 cc. dry PhNO2, 5 g. 1-C10H7OMe and 7 g. BzNHCH2CH2Br with constant agitation, letting stand overnight and decomposing with ice and dilute HCl, filtering, washing with water, dilute alkali, and AcOH and crystallizing from PhNO2, colorless rectangular plates, m. 254-5°. It was obtained also in the absence of BzNHCH2CH2Br. To synthesize 2-(4-hydroxy-1-naphthyl)ethylamine, (1) 2-(4-ethoxy-1- naphthyl)ethyl alc. was made by treating 18.5 cc. ethylene oxide in ether with a Grignard reagent from 70 g. 4,1-EtOC10H6Br, 7 g. Mg and a mixture of 400 cc. dry ether and dry C6H6 and purified by distillation as a colorless oil (22 g.), b2-3 178-86°; picrate, brilliant red needles, m. 104.5°. (2) EtOC10H6CH2CH2Br, prepared by treating PBr3 with the alc. at room temperature, was converted into 2-(4-ethoxy-1-naphthyl)ethylphthalimide in poor yields by the usual method, colorless needles from alc., m. 175°. (3) Urotropine reacted with EtBr to give a poor

yield of the addition compound as a colorless, amorphous powder, decomposing 189°. 3,4-Dimethoxy-α-benzamido-1- acetonaphthone (0.8 g. from a mixture of 6.3 g. 1,2-C10H6(OMe)2 and 8 g. hippuryl chloride in 40 cc. CS2 gradually treated with 6 g. finely powdered AlCl3, heated on the water bath for 2 h., allowed to stand overnight, etc.,) colorless, hair-like needles from acetone, m. 261-2°. To prepare 4-hydroxy-N-(3,4-dihydroxyphenethyl)-1- naphthamide-HCl, PhSO2NHCH2CH2C6H3(OMe)2, colorless prismatic needles from alc., m. 89°, was converted to the Na salt, and treated in 50 cc. alc. with 4 g. 4-methoxy-α-iodo-1-acetonaphthone, the mixture refluxed on the water bath for 4 h., the 4-methoxynaphthylacyl derivative purified through an ethereal solution and heated in a sealed tube with 15 cc. concentrated HCl for 5 h. at 170-80°; the aqueous solution of the hydrochloride, evaporated in vacuo over H2SO4, gave 0.8 g. colorless needles from alc.-ether, decomposing above 180°; picrate, orange-red needles from water, decompose 189-91°. α-(Phenylsulfonylamino)-1- acetonaphthone, colorless needles from AcOH, m. 121°. α-(Phenylsulfonylamino)-2-acetonaphthone, colorless prismatic needles from AcOH, m. 165°. 4-Methoxy-α-amino-1- acetonaphthone-HCl, by hydrolysis of the N-Ac derivative with dilute HCl, colorless needles from water, decomposing at 204°; picrate, golden-yellow needles from alc., decompose at 191°. N-Phenylsulfonyl derivative, colorless needles from AcOH, m. 147°. N-[2-(1- Naphthyl)ethyl]-N-homoveratrylbenzenesulfonamide, obtained by treating 1-C10H7CH2CH2Br with the Na salt of PhSO2NHCH2CH2C6H3(OMe)2 in alc. solution, colorless, rectangular plates, m. 82-3°. 2,2-Di-1-naphthyl-2-hydroxyethylamine-HCl, obtained by treating a Grignard reagent from 9 g. 2-C10H7Br, 8.5 g. Mg and 35 cc. ether with 12.8 g. α-amino-1-acetonaphthone-HCl, boiling gently for 2 h. on the water bath, and decomposing with cold dilute HCl (9.5 g. yield), colorless, prismatic needles from alc., decomposing 260°; picrate shiny yellow needles or plates from AcOH, decompose 168°. No data are given on the physiol. activity of these products.

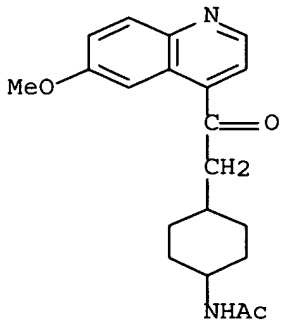
Controlled or Index Terms

855881-46-8, Ketone, 5-acenaphthenyl 1-piperidylmethyl, hydrochloride
(preparation of)

Hit Structure

CAS Registry Number
855881-46-8 CA

Chemical or Trade Name
Acetamide, N-[4-(6-methoxy-4-quinolylcarbonylmethyl)cyclohexyl]- (4CI)
(CA INDEX NAME)



Original Reference

37:5049f-i,5050a-i

L12 ANSWER 68 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

36:37219 CA Full-text

Title

Antiplasmodial action and chemical constitution. V. Carbinolamines derived from 6-methoxyquinoline

Author/Inventor

King, Harold; Work, Thomas S.

Source

Journal of the Chemical Society (1942) 401-4 CODEN: JCSOA9; ISSN: 0368-1769

Document Type

Journal

Language

Unavailable

Abstract

cf. C. A. 35, 116.7. In part III (C. A. 35, 115.6) it was shown that with alkylaminomethyl-6-methoxy-4-quinolylcarbinols there was a zone of activity where the sum of the C atoms of the N-alkyl groups lay between 8 and 12. Compds. of this type reported in the present work proved to be inactive when tested on bird malaria in canaries. Benzylhexylamine (I) is a by-product in the preparation of benzyldihexylamine (part III); it is the main product (62%) from 66 g. hexyl bromide and 85.6 g. PhCH2NH2 when heated on a water bath for 1 hr. Heating 19.1 g. I, 15.1 g. BuBr and 7.7 g. of KOH at 140° for 5 hrs. gives 17.4 g. of benzylbutylhexylamine, b18 170°; reduction of 24.7 g. with PtO2 in AcOH at 70° for 12 hrs. gives 13.6 g. of butylhexylamine (II), b738 201° (HCl salt, m. 268°). Benzylamylhexylamine, in 79% yield from 19.1 g. I, 16.6 g. AmBr and 17.7 g. KOH at 140° for 3 hrs., b15 175-7°; catalytic reduction of 26.1 g. gives 14.4 g. of amylhexylamine, b15 108°, b763 216-18° (HCl salt, m. 275-6°). I (19.1 g.), 17 g. PrI and 7.7 g. KOH at 140° give 20.5 g. of benzylpropylhexylamine, b15 155°; reduction of 34.9 g. gives 15.4 g. of propylhexylamine (III), b753 171-81° (HCl salt, m. 243°). I (9.55 g.), 8.6 g. EtI and 3.85 g. KOH, heated in sealed tubes at 140-50° for 4 hrs., give 15.6 g. of benzylethylhexylamine, b13 145°; reduction of 29 g. gives 10.9 g. of ethylhexylamine (IV), b743 158° (HCl salt, m. 191°). PhCH2NH2 (42.8 g.) and 41.4 g. nonyl bromide give 30.1 g. of benzylnonylamine (V), b12 179° (HCl salt, m. 199-200°), and 7 g. of benzyldinonylamine, b12 240° . V (34.9 g.), 25.5 g. PrI and 11.5 g. KOH at 130° give 32.5 g. of benzylpropylnonylamine, b13 185°; reduction of 32.5 g. gives 12.3 g. of propylnonylamine, b14 119° (HCl salt, m. 237°). V (23.3 g.), 17.16 g. EtI and 7.7 g. KOH, heated on the water bath for 4 hrs., give 22.1 g. of benzylethylnonylamine (VI), b11 178°, and 2.2 g. of benzyldiethylnonylammonium iodide, m. 64-5°; reduction of VI gives 84.3% of ethylnonylamine, b14 103° (HCl salt, m. 200-1°). V (16 g.) and MeI react vigorously, giving 9.25 g. V and benzyldimethylnonylammonium iodide, m. 89°; the methochloride from 14.1 g. of the iodide, treated with Ag2O, filtered, saturated with H2S, evaporated to a sirup, the evaporation repeated 3 times with a little EtOH and the product then heated 4 hrs. on the water bath, gives dimethylnonylamine, b741, 209°; methiodide, m. 170°. Heating 24 g. nonyl iodide and 20 cc. 33% MeNH2 in MeOH at 100° for 6 hrs. gives 2.6 g. of methylnonylamine (VII), b14 95° (HCl salt, m. 180-1°), and 10 g. of methyldinonylamine, b15 190-2°. Nonylamine (9 g.) and 7 g. BzH, heated 1 hr. on the water bath, give 13.6 g. of benzylidenenonylamine, b14 179°; heating 1 hr. with 8.4 g. MeI and then with 90% EtOH for 1 hr., acidification of the residue and extraction of the BzH with ether give 6.6 g. of VII. The preparation of quininic acid in an almost quant. yield is described. 6-Methoxy-4-quinolyl bromomethyl ketone-HBr (part III) (6.6 g.), added slowly to 7.1 g. IV in 10 cc. Me2CO and after 1 hr. warmed at 45° for 45 min., the reaction mixture diluted with dry ether, the IV.HBr filtered and the residue in acidified EtOH reduced with PtO2, gives 20% of (ethylhexylaminomethyl) (6 - methoxy - 4 - quinolyl)carbinol dipicrate, m. 170°; III gives 17% of the propylhexyl derivative, m. 169°; VII yields the methylnonyl derivative, m. 151°; II (9.4 g.) gives 0.7 g. of the butylhexyl derivative, m. 158-9°. 2,2, 6-Trimethylpiperidine (6 g.) gives the (2,2,6-trimethylpiperidino) derivative, m. 214°; the HCl salt (0.7-g. yield) , m. 214-18 (decomposition). In the case of the other amines, the catalytic reduction of the intermediate quinolylketo base was followed by fission of the basic group.

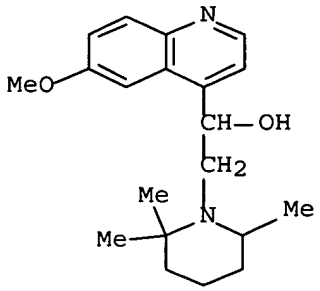
Controlled or Index Terms

855766-22-2, 4-Quinolinemethanol, 6-methoxy-α-(2,2,6-trimethyl-1-piperidylmethyl)-, hydrochloride
(preparation of)

Hit Structure

CAS Registry Number
855766-22-2 CA

Chemical or Trade Name
4-Quinolinemethanol, 6-methoxy-α-(2,2,6-trimethyl-1-piperidylmethyl)-, hydrochloride (4CI) (CA INDEX NAME)



● HCl

Original Reference
36:5819f-i,5820a-e

L12 ANSWER 69 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number
35:613 CA Full-text

Title
Antiplasmodial action and chemical constitution. III. Carbinolamines derived from naphthalene and quinoline

Author/Inventor
King, Harold; Work, Thomas S.

Source
Journal of the Chemical Society (1940) 1307-15 CODEN: JCSOA9; ISSN: 0368-1769

Document Type
Journal

Language
Unavailable

Other Source
CASREACT 35:613

Abstract
cf. C. A. 32, 4219.6. Since the previously described compds. (in which the piperidine ring was attached at its α-position through the carbinol group to the methoxyquinoline nucleus) were difficult of access and modification by conversion into the tert-bases led to loss of activity, it seemed desirable to prepare a more accessible series of simple carbinolamines in which the strongly basic N center was still separated from the quinoline nucleus by 2 C atoms as in quinine or hydroquinine. C10H7COCl (4.4 g.) and CH2N2 in ether (12 h. at room temperature) give 4.4 g. of α-naphthoyldiazomethane, pale yellow, m. 56°; dry HCl in ether gives 94% of α-naphthacyl chloride (I), an oil. I (5.15 g.) and 4.6 g. of piperidine in ether, followed by catalytic reduction with Pd-C in acid MeOH, give 3.7 g. of piperidinomethyl-1-naphthylcarbinol-HCl, m. 270°; Me2NH

(8 cc. of 33% solution) and 2.3 g. of I, followed by reduction, give 2.1 g. of dimethylaminomethyl-1-naphthylcarbinol, whose picrate m. 178-80°; the picrate of the di-Et analog (60% yield) m. 136°; the picrate, m. 149-50°, of the di-Pr analog was isolated with difficulty in 25% yield. I and (HOCH2CH2)2NH, followed by reduction, give 20% of the picrate, m. 127-8°, of diethanolaminomethyl- 1-naphthylcarbinol. 7,1-MeOC10H6COCl (18 g.), treated with CH2N2 and then with dry HCl, gives 20.4 g. of 7-methoxy-1-naphthacyl bromide (II), b1 165-70°; the chloride b1 155-60°. II and piperidine in ether give piperidinomethyl-7-methoxy-1-naphthylcarbinol, whose HCl salt m. 225-7°. Cinchoninyl chloride (4 g.) and CH2N2 in Et2O (24 h.) give 2.5 g. of 4-quinolyl diazomethyl ketone, m. 83-4°; dry HCl gives 1.25 g. of the chloromethyl ketone, yellow, m. 101°; the bromomethyl ketone m. 75.5° (HBr salt (III), m. 225-7° (decomposition)). Reaction of 40.2 g. Et cinchoninate and 20 g. AcOEt with NaNH2 in C6H6, refluxed 13 h., gives 29-32 g. of Et 4-quinoloylacetate. Addition of 2.5 g. of III in portions during 10 min. to 2 g. piperidine in 15 cc. ether, filtration of the HBr salt after 1 h., removal of the ether, and catalytic reduction in acid MeOH give a nearly quant. yield of piperidinomethyl-4-quinolylcarbinol, whose dipicrate m. 168° (decomposition); Rabe, et al. (C. A. 11, 2790), gives 172-4°; HCl salt, m. 160°. III (5.9 g.) and 4.2 g. Et2NH give 4.7 g. of the dipicrate, m. 168°, of diethylaminomethyl-4- quinolylcarbinol; HCl salt, m. 182°; dipicrate of the di-Pr analog, m. 153°; dipicrate of the di-Am analog, m. 142°. 4,4'-Bipiperidyl (22 g.) in H2O-Me2CO (neutralized with HCl) at 50°, treated with BzCl dropwise (the pH being maintained at 3.8), gives 16.5 g. of the di-Bz derivative, m. 167°, and 15.5 g. of the N-Bz derivative (IV), whose HBr salt m. 233° and perchlorate m. 268°. III (3.65 g.) and 9.5 g. IV in Me2CO give 2.1 g. of the tri-HCl salt, m. above 300° (decomposition), of 4',4"-piperidylpiperidinomethyl-4-quinolylcarbinol; tripicrate, m. 195°. PhCH2NH2, hexyl bromide and KOH, refluxed 8 h. at 150°, give 7.4 g. of hexylbenzylamine, b14 146-8° (HCl salt, m. 217-18°), and 29.7 g. of dihexylbenzylamine (V), b14 185°; catalytic reduction of V with PtO2 at 70° in AcOH for 6 h. gives a nearly quant. yield of dihexylamine, b15 122° (tetrahydrate, b14 114-16°; HCl salt, m. 270°). Similarly, 5 g. PhCH2NH2 and 5 g. heptyl bromide give 2.6 g. of heptylbenzylamine, b14 167° (HCl salt, m. 196°), and 9.35 g. of diheptylbenzylamine, b16 205°, which is reduced to diheptylamine, b15 147-8°, m. 1° (trihydrate, m. 32-3°; HCl salt, m. 255°). 6-Methoxy-4-quinolyl bromomethyl ketone (VI) (Rabe) gives a nearly quant. yield of piperidinomethyl-6- methoxy-4-quinolylcarbinol (HCl salt, m. 164°); diethylaminomethyl analog, 48% yield (di-HCl salt, m. 182-3°); dibutylaminomethyl analog (VII) (HCl salt, m. 142°; dipicrate, m. 169°); diamylaminomethyl analog, (VIII), as dipicrate, m. 155°; diisoamylaminomethyl analog, as dipicrate, m. 156°; dihexylaminomethyl analog (IX), as dipicrate, m. 173°; diheptylaminomethyl analog, as dipicrate, m. 130°. (iso-Bu)2NH gives only the Me analog, whose HCl salt m. 127°. Results are given of tests on bird malaria due to Plasmodium relictum in canaries for most of these compds. No naphthyl, methoxynaphthyl or quinolyl derivs. had any noticeable activity; in the methoxyquinolyl series VII-IX were active, whereas the lower and the higher homologs were inactive. IV and VI give 4',4"-piperidylpiperidinomethyl-6-methoxy-4-quinolylcarbinol, whose tri-HCl salt decompose above 300°.

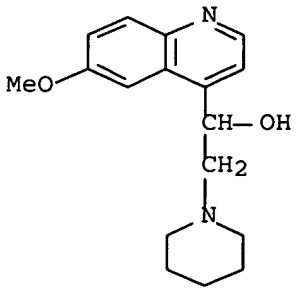
Controlled or Index Terms

63867-83-4, 4-Quinolinemethanol, 6-methoxy-α-1-piperidylmethyl-, -HCl
(preparation of)

Hit Structure

CAS Registry Number
63867-83-4 CA

Chemical or Trade Name
4-Quinolinemethanol, 6-methoxy-α-(1-piperidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

Original Reference
35:115f-i,116a-g

L12 ANSWER 70 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
33:38198 CA Full-text
Title
4-Aminocyclohexylacetic acid
Author/Inventor
Ferber, Erwin; Bendix, Hans
Source
Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1939), 72B, 839-48
CODEN: BDCBAD; ISSN: 0365-9488
Document Type
Journal
Language
Unavailable
Abstract
cf. C. A. 28, 2336.6; 33, 4245.5. The synthesis of 4- aminocyclohexylacetic acid (I) was undertaken by starting, as before, from PhCH2CN, nitrating it, hydrolyzing the p-nitro derivative to p-O2NC6H4CH2CO2H (II) and reducing this to the amino acid (III). Although the yields were not bad, the most varied reducing agents proved unsuitable for the purpose in hand; this was especially true of (NH4)2S, for the product could not be freed from S which poisoned the catalyst in the subsequent perhydrogenation. Pt oxide in alc. finally gave a perfectly pure product in quant. yield. It is advisable to use the Et ester of II which, like that of III, is soluble in alc., for when the free II is used the reduction product begins to sep. when about half the calculated amount of H has been absorbed and covers up the catalyst, thereby slowing up the reaction. The ester of II, m. 65-6°, is obtained in 97% yield by simultaneous hydrolysis and esterification of the nitrile with alc. HCl. When the amino group of III or its ester is protected by acetylation or methylation, the nucleus hydrogenation, even at 50-60°, is not accompanied by any cleavage of NH3 and formation of secondary and tertiary bases. While acetylation of III or the Et ester is smoothly effected with the required amount of Ac2O in AcOH, methylation offered great difficulties. The 2 isomeric 4-acetylaminocyclohexyl acetic acids (IV) obtained by nucleus hydrogenation of p-AcNHC6H4CH2CO2H (V) were separated by virtue of their different solubilities in water; the ratio of cis:trans compound was 77.5:22.5. The stereoisomeric Et ester obtained by hydrogenation of the ester of V could not be separated satisfactorily. The stereoisomeric esters of the methylamino acids had to be benzoylated before they could be separated The final object of this work was the condensation of the ester of cis-IV with Et 2-methylcinchonate (VI) or Et quinate (VII) to the β-ketonic esters and their saponification to the ketones. Preliminary expts. were made on the condensation of AcOEt with BzOEt, VI and VII. The Et 6-methoxy-4-quinoloyl(4-acetaminocyclohexyl)acetate (VIII), prepared from

cis-IV and VII, and the corresponding Me ketone (IX) (30% yield) could not be obtained in crystalline form. It has as yet not been possible to effect the condensation with VI; no keto ester could be isolated from the completely resinified reaction products. cis-IV, m. 185-7° (Et ester, m. 60-2°). trans-IV, m. 235° (Et ester, m. 115-16°). Et p-methylaminophenylacetate (75% from the ester of III in suspension in aqueous Na2CO3 slowly treated with Me2SO4), b2 130°, b739 297° (turning brown) (nitrosamine, yellow, m. 37°; HCl salt, m. 217°); free acid, brown oil gradually solidifying without becoming crystalline (nitrosamine, faintly yellow, m. 126°). Et cis-p-(benzoylmethylamino)cyclohexylacetate, BzNMeC6H10CH2CO2Et, m. 83-7° (free acid, m. 186-8°); trans-ester, m. 147-8° (acid, m. 235-6°). The cis and trans esters are obtained in the ratio 82:18; yield, 86%. Et 2-methyl-4-quinoloylacetate was obtained as a red-orange liquid in 52.8% yield from VI, AcOEt and NaOEt. The quality of the NaOEt has a decisive influence on the smooth course of the condensation. It was prepared fresh for each experiment by dissolving 1 g. Na in a mixture of 10 cc. xylene (distilled from Na) and 5 cc. absolute alc. in a current of dry H, heating up to 200°, and allowing to cool in H, and was immediately used in the same flask for the condensation. Refluxed with 25% H2SO4, the ester gave 2-methyl-4-quinolyl Me ketone, m. 68-9°, mol. weight in camphor 179, has a bitter taste; HCl salt, m. 153°; picrate, yellow, m. 177-8°; p-nitrophenylhydrazone picrate, orange, m. 257° (decomposition). VIII, yellow oil with bitter taste. IX, reddish yellow oil; picrate, light yellow, m. 170°, forming a p-nitrophenylhydrazone, orange, m. 252° (decomposition).

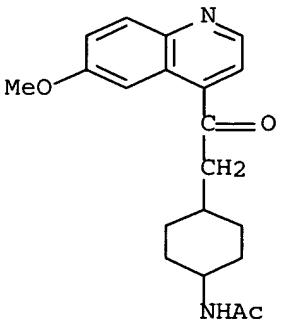
Controlled or Index Terms

855881-46-8, Acetamide, N-[4-(6-methoxy-4-quinolylcarbonylmethyl)cyclohexyl]-
(and derivs.)

Hit Structure

CAS Registry Number
855881-46-8 CA

Chemical or Trade Name
Acetamide, N-[4-(6-methoxy-4-quinolylcarbonylmethyl)cyclohexyl]- (4CI)
(CA INDEX NAME)



Original Reference

33:5370e-i,5371a-d

L12 ANSWER 71 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

32:30524 CA Full-text

Title

Antiplasmodial action and chemical constitution. II. Some simple synthetic analogs of quinine and cinchonine

Author/Inventor

Ainley, A. D.; King, Harold

Source

Proc. Roy. Soc. (London) (1938), B125, 60-92

Document Type

Journal

Language

Unavailable

Other Source

CASREACT 32:30524

Abstract

In bird malaria, quinicine (quinotoxine), the 2 stereoisomeric dihydroquinocinols obtained by its reduction, and α-N- methyldihydroquinicol are inactive. Antiplasmodial action is exerted by 4-(6-methoxyquinolyl)-α-piperidylcarbinol and iso-4-(6- methoxyquinolyl)-α-piperidylcarbinol. The normal Me, Pr, allyl, Bu and crotyl derivs. of the first-mentioned carbinol and of 4-quinolyl-α-piperidylcarbinol lack such action.

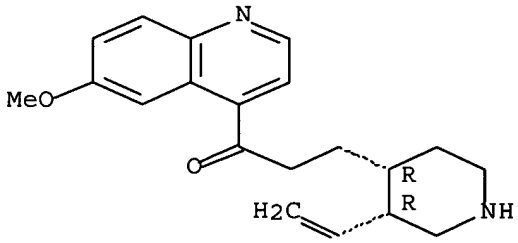
Controlled or Index Terms

84-55-9, Quinicine
(antiplasmodial action of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

32:4219e-g

L12 ANSWER 72 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

26:36849 CA Full-text

Title

Quinotoxine

Author/Inventor

Bachstez, M.; De Caro, L.

Source

Archiv fuer Experimentelle Pathologie und Pharmakologie (1932), 164, 314-23 CODEN: AEXPBL; ISSN: 0365-2041

Document Type

Journal

Language

Unavailable

Abstract

Quinotoxine can be demonstrated in solns. containing quinine by adding to 1 cc. of a 1% alkaloid solution 5 drops of freshly prepd 2% Na nitroprusside and 5 drops of 30% crystalline Na2CO3. A red color indicates the presence of quinotoxine, the reaction being sensitive to as little as 125γ per cc. A yellow color is not a pos. reaction. The min. lethal dose of quinine dihydrochloride is 1.2 g. per kg. for white rats and 0.5 g. per kg. for white mice; corresponding values for quinotoxine are 0.32 g. and 0.24 g. The toxicity of a mixture is greater than the combined toxicity of the drugs considered individually.

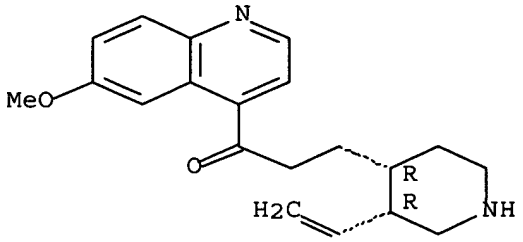
Controlled or Index Terms

84-55-9, Quinicine
(preparation of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

26:3836f-h

L12 ANSWER 73 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

19:4615 CA Full-text

Title

Arecolone and N-methyl-ω-amina-β-pipecoline

Author/Inventor

Wohl, A.; Prill, A.

Source

Ann. (1924), 440, 139-49

Document Type

Journal

Language

Unavailable

Abstract

Condensation of (EtO)2CHCH2CH2NH2 and HCHO gives an anhydro-base, [CH2:NCH2CH2CH(OEt)2]n, oil which decomps. on distilling in vacuo and reduces Fehling solution and NH4OH-AgNO3. A modification of Blaise and Maire's method for CH2:CHAc (C. A. 2, 1824) is given, the yields being 25-35%. The residue, treated with AcCl, gives the compound, C9H14O5, m. 85°. CH2: CHAc does not appear to condense with (EtO)2CHCH2NH2 to give a definite compound With (EtO)2CHCH2CH2NHMe, there results the compound, (EtO)2CHCH2CH2NMeCH2CH2Ac, light yellow oil, which cannot be distd, in vacuum but with concentrated HCl in a cooling mixture it yields 40-60% of the HCl salt, m. 204°, of arecolone (N-methyl-Δ3-tetrahydropyridine β-Me ketone), light yellow oil, b0.01 80-2°, reduces acid KMnO4 in the cold. HBr salt, m. 223°. Semicarbazone, m. 219° (decomposition); HCl salt, m. 233°. Arecaidine aldehyde oxime, m. 130°. Reduction with Na-Hg gives 50% of N-methyl-ω-amino-β-pipecoline, b12 116-8°; Bz derivative, m. 161-2°.

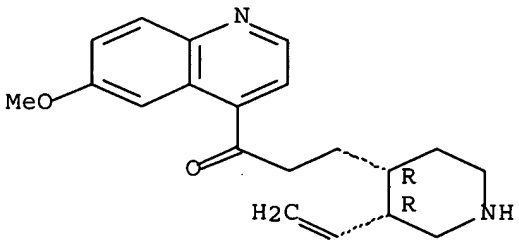
Controlled or Index Terms

84-55-9, Quinicine
(aliphatic derivs.)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

19:656c-e

L12 ANSWER 74 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

16:15432 CA Full-text

Title

Cinchona alkaloids. XXIV. The synthesis of vinyl-free quinatoxines and quinaketones

Author/Inventor

Rabe, Paul; Kindler, Karl; Wagner, Otto

Source

Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1922), 55B, 532-41
CODEN: BDCBAD; ISSN: 0365-9488

Document Type

Journal

Language

Unavailable

Graphics

For diagram(s), see printed CA Issue.

Abstract

In the preparation, of β-4-piperidylpropionic acid (A) the method previously described was modified. The crude mixture of pyridine bases, before fractionation, must be carefully dried over KOH; 360 g. of the fraction b. 140-8° with 320 g. chloral and 3 g. $ZnCl_2$ gave 60 g. 4-chloralpicoline, m. 166°. Ten g. of the ester of A and 16 g. K_2CO_3, in 10-5 parts boiling Et_2O (protected from moisture) treated in the course of 0.5 hr. with 8.6 g. BzCl in an equal volume of Et_2O and turbined 3 hrs. gave 92% ethyl β-N-benzoylpiperidyl-4-propionate, thick yellow bitter odorless oil, b8 240°; heated 3.5 hrs. at 80-5° with 1 mol. of Et cinchoninate and a 10% excess of NaOEt suspended in C_6H_6, it gives 66% of the β-ketonic ester (VI) as a thick brown oil permeated with crystals; 2 g. of this boiled 4 hrs. under a reflux with 20 g. of 17% HCl yields 0.7 g. 9-rubatoxanone (β-piperidyl-4-ethyl 4'-quinolyl ketone), thick yellow bitter oil giving the reactions of the quinatoxines (strongly alkaline, gives a cherry-red color with diazobenzenesulfonic acid and a red-violet color with $PhNO_2$ containing nitrothiophene); dichloroplatinate, dark yellow crystals with 2 H_2O, blackens 245°, m. 240-5°; 0.5 g. in 1 g. 48% HBr at 100° slowly treated with 1 g. Br in 11 g. concentrated HBr and evaporated in vacuo over KOH yields yellow crystals, m. 184°, deliquescent in the air, probably consisting of 8-bromo-9-rubatoxanone dihydrobromide; these treated under Et_2O with small portions of Na_2CO_3, the mixture being thoroughly shaken after each addition of the soda, dried with KOH and evaporated give 0.4 g. of a thick brown oil still containing a little Br, which, heated a short time on the H_2O bath in a little concentrated HCl with 0.5 g. $SnCl_2$, gives 0.3 g. 9-rubanone (8-quinuclidyl 4'-quinolyl ketone), thick yellow bitter oil no longer giving the quinatoxine reactions; monopicrate, yellow needles from alc., sinters 170-80°. The β-ketonic ester obtained in 50% yield by the condensation of the ester of A with Et quinate is a thick yellow oil giving 50% of 6-methoxy-9-rubatoxanone (β-piperidyl-4-ethyl 6'-methoxy-4'-quinolyl ketone), thick reddish yellow oil giving the same reactions as the quinatoxine obtained from quinine (soluble in acids with yellow color, blues litmus in even very dilute alc. solution, soluble in the usual organic solvents, difficultly in cold, easily in hot H_2O, very bitter, gives in very dilute alc. solution with Cl water and excess of NH_4OH an emerald-green color, with $PhNO_2$ containing nitrothiophene a red-violet color, with diazobenzenesulfonic acid a red color); dichloroplatinate (2 H_2O), sinters 265°, m. 278-85°; monopicrate, oily; monopicrolonate, m. 152°. 6'-Methoxy-8-bromo-9-rubatoxanone, could not be obtained in solid form. 6'-Methoxy-9-rubanone (8-quinuclidyl 6'-methoxy-4'-quinolyl ketone) (0.55 g. from 1.3 g. of the quinatoxine through the derivative), thick yellow oil gradually depositing a small amount of crystals, tastes bitter, becomes discolored in the light, even in a vacuum desiccator, does not give the quinatoxine reactions but resembles quininone by dissolving in mineral acids with intense yellow color and in that the yellow color of its alc. solns. deepens on addition of NaOH and especially of NaOEt; monopicrate, sinters 168°, m. 173-4°; monopicrolonate, m. 148-50°, foams 170°; dichloroplatinate, stout needles with 2 H_2O, sinters 260°, m. 300°.

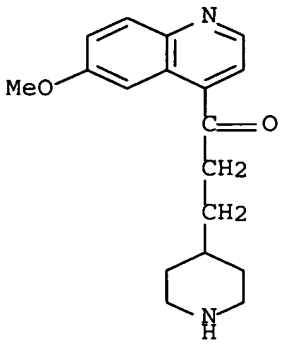
Controlled or Index Terms

83255-60-1, 1-Propanone, 1-(6-methoxy-4-quinolyl)-3-(4-piperidyl)-
(and derivs.)

Hit Structure

CAS Registry Number
83255-60-1 CA

Chemical or Trade Name
1-Propanone, 1-(6-methoxy-4-quinolinyl)-3-(4-piperidinyl)- (9CI) (CA INDEX NAME)

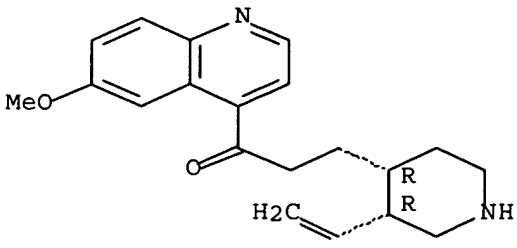


Original Reference
16:2691f-i,2692a-h

L12 ANSWER 75 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
16:11551 CA Full-text
Title
Quinotoxine in quinine salts
Author/Inventor
Ganassini, Domenico
Source
Bollettino Chimico Farmaceutico (1922), 61, 193-9 CODEN: BCFAAI; ISSN: 0006-6648
Document Type
Journal
Language
Unavailable
Abstract
Sterilization of solns. of quinine salts or long exposure to light causes a rearrangement of a small part of the quinine into quinotoxine. The latter contains a ketone group, and may be detected by the yellow precipitate obtained on treatment with HNO2, or by the phenylhydrazone which ppts. out and gradually assumes an intense orange yellow color.
Controlled or Index Terms
84-55-9, Quinicine
(in quinine salts)
Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

16:2008h-i

L12 ANSWER 76 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

16:11211 CA Full-text

Title

Syntheses in the cinchona series. IX. Certain quinicine and benzoylcinchona salts, crystalline ethyldihydrocupreine (optochin) base, and other derivatives

Author/Inventor

Heidelberger, Michael; Jacobs, Walter A.

Source

Journal of the American Chemical Society (1922), 44, 1091-8 CODEN: JACSAT; ISSN: 0002-7863

Document Type

Journal

Language

Unavailable

Abstract

A number of miscellaneous cinchona derivs. are described, many of which served as the initial materials for other work to be published in subsequent papers. Dihydroquinicine sulfate, from the crude base neutralized to wet litmus in absolute alc. with 30% aqueous H2SO4 and treated with Et2O until the initial turbidity just dissolved, crystals from 95% EtOH-Me2CO, comes to equilibrium in the air with 3H2O or its equivalent, softens (anhydrous) and turns yellow 173°, m. 174-6°, [α]D21.5-8.3° (H2O, c 0.968). N-Methylquinicine dihydrochloride, from the base (obtained by decomposing quinine methiodide with excess of strong alkali in an autoclave) in alc. acidified to Congo red with concentrated HCl and diluted with Me2CO until the turbidity just redissolved, rhombic aggregates with 1 H2O, dissolves easily in H2O with bright yellow color (greenish in thin layers), has a definite anesthetic effect on the tongue, [α]D23 16.6° (H2O, c 0.992), softens 140-50° to a jelly, m. 153-5°, gives the thalleoquinine test. N-Methyldihydroquinicine hydrochloride (25 g. from 60 g. dihydroquinine methiodide), cream-colored microprisms and needles with 0.5 H2O from EtOH-Et2O, soluble in H2O with dull yellow color changing to the characteristic bright yellow-green of the quinicine diacid salts on addition of dilute HCl, has a slowly developing anesthetic effect on the tongue, softens (air-dry) about 120 ° to a jelly, m. about 145°, m. (anhydrous) to a jelly 150-3° and a liquid 163°, [α]D26.5-9.4° (H2O, c 1.015). N-Ethylquinicine hydrochloride, short faintly yellow rods from 95% alc., forms a faintly bitter aqueous solution, is definitely anesthetic, gives a dark blue-gray thalleoquinine test changing to lilac, softens 210deg;, m. 202-4deg;, [α]D23 68.1° (H2O, c 0.665). N-Ethyldihydroquinicine hydrochloride, minute platelets from alc., softens 196-8° to a tar, m. completely 202°, [α]D27-14.4°, (H2O, c 1.007), is anesthetic. N-Benzyldihydroquinicine hydrochloride, long narrow platelets from EtOH-Et2O, m. 161-4° (slow decomposition), [α]D24.5- 659° (50% alc., c 1.093), is anesthetic. Ethyldihydrocupreicine (optotoxine) sulfate (28 g. from 50 g. optochin boiled 30-5 hrs. in dilute AcOH), voluminous hair-like needles from alc., soluble in H2O with pale greenish yellow color changing to intense lemon-yellow with a little mineral acid, contains 5.81% solvent of crystallization, m. (unsolvated) 164-6°, [α]D28-7.8° (H2O, c 1.090), is anesthetic; hydrobromide (12.5 g. from 25 g. crude dihydroqninicine demethylated with HBr (d. 1.49)), olive-yellow aggregates of pointed platelets from H2O, m. 213-5°, soluble in H2O with a yellow color becoming more intense with more acid, gives a deep olive-brown color with FeCl3 in H2O, readily couples with alkaline diazotized sulfanilic acid, [α]D21.5-5.4%deg; (H2O, c 0.827). Quinicylglycinanilide dihydrochloride (2.3 g. from 4 g. quinicine oxalate and 1.7 g. ClCH2CONHPh heated on the H2O bath with NaI, NaOAc and NaOH in aqueous alc.), sheaves and rosets of pale yellow needles from H2O-HCl, sinters to a jelly above 130°, m. about 190° (gas evolution). Quinicylglycine-p-hydroxyanilide acid sulfate, similarly prepared with p-ClCH2CONHC6H4OH, orange leaflets and needles from 50% alc. containing a drop of H2SO4, m. 212-5°, soluble in dilute NaOH with pale yellow color. Benzoylcinchonidine dihydrochloride (33.8 g. from 30 g. cinchonidine with BzCl on the H2O bath), club-shaped prismatic needles with 1 H2O from EtOH-Et2O, darkens (anhydrous) and sinters above 200° m. 208-11° (decomposition). Benzoyldihydrocinchonidine hydrochloride, from the preceding salt in H2O with PdCl2 and H, rhombic crystals with 1 H2O from EtOH-Et2O, softens (anhydrous) 160-5deg; to a jelly, m. 185-90°, [α]D27.5 124.9° (alc., c 1.093). Benzoylquinine dihydrochloride, short prisms with 1 H2O; anhydrous, it turns yellow on heating, softens and finally m. 229-32° (decomposition), [α]D22 88.7° (H2O, c 0.892). Benzoyldihydroquinine hydrochloride, flat cream-colored

prisms with 0.5 H2O from Me2CO-Et2O-ligroin, m. (anhydrous) 235-40° (decomposition), [α]D24 140.6° (alc., c 1.298). Cinchotenine methyl ester, prepared with MeOH-HCl, prismatic plates from alc., m. 243-4.5° (decomposition), [α]D22 118.7° (Me OH, c 0.206). Ethyl ester hydrochloride, minute plates with 0.5 H2O from EtOH-Et2O, decomps. about 250°. Cupretenine (quitenol) methyl ester dihydrochloride, silky needles from EtOH-Et2O, m. about 200° (gas evolution), couples with alkaline diazotized sulfanillic acid. Ethyldihydrocupreine (optochin) seps. from PhMe in irregular platelets with both PhMe and H2O of crystallization (loss in weight of the air-dry substance in vacuo, finally at 100°, 15.7%), [α]D26.5 -112.7° (alc., c 1.002), m. 80-4°; solvent-free, it m. 123-8°, [α]D25-136.2° (alc., c 1.005); ethobromide, from the components in boiling Me2CO, minute rhombic plates with 1 H2O from Me2CO-Et2O, softens (anhydrous) above 120°, m. completely 185°, [α]D25-111.8° (H2O, c 1.100). Dihydroquinine ethobromide, from the components in boiling CHCl3-Me2CO, platelets with 0.5 H2O from EtOH-Et2O, m. (anhydrous) 188-90° (slight decomposition). Hydrobromocinchonidine, prepared like the following compound, m. 176-7° (decomposition), [α]D21.5-226.8° (MeOH, c 0.1608). Hydrobromocupreine (or hydrobromoapoquinine) dihydrobromide (4.5 g. from 10.5 g. quinine at 110° with HBr (d. 1.49)), delicate tawny voluminous needles with 3.5 H2O from dilute HBr, forms a very faintly yellow aqueous solution becoming a deeper yellow on neutralization and then giving a pale brown color with FeCl3, sinters (anhydrous) 190-5°, slowly intumesces 197-203°, [α]D21-161.8° (H2O, c 1.022).

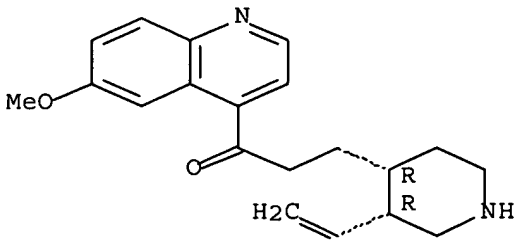
Controlled or Index Terms

84-55-9, Quinicine
(salts)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry

Absolute stereochemistry.

Original Reference

16:1957f-i,1958a-i

L12 ANSWER 77 OF 78 CA COPYRIGHT 2006 ACS on STN

Accession Number

7:20361 CA Full-text

Title

Synthetic Bases Nearly Related to the Quinine Alkaloids

Author/Inventor

Kaufmann, Adolf

Patent Assignee/Corporate Source

Univ. Geneva

Source

Berichte der Deutschen Chemischen Gesellschaft (1913), 46, 1823-37 CODEN: BDCGAS; ISSN: 0365-9496

Document Type

Journal

Language

Unavailable

Abstract

That the typical toxic effects of large doses of quinine are due to its rearrangement in the system into quinotoxine (cf. Biddle, C. A., 6, 1434) is indicated by the fact that such a rearrangement of cinchonine can be effected to a small extent by warming with the physiologically active acids (1 : 1000 HCl, very dilute lactic and butyric acids). Pharmacodynamical expts. with various natural and synthetical toxic isomers of the quinine alkaloids lead to the conclusion that it is the piperidine nucleus at the end of the side chain which is the cause of the toxic effects. The Et ester of meroquinene (hydrochloride, m. 165°), obtained by b. with alc. HCl the acid, which is prepared by Konig's method, is very similar in constitution to the piperidine half of the quinotoxine and like it is a strong cramp-producing poison. It is reduced quant. by the Paal-Skita method to the hydrochloride, needles, m. 158°, [α]D22 5.71°, of cincholoipon ethyl ester, b14 140°, d. 0.993, [α]D18-17.2°, 10 times more toxic than meroquinene, combines explosively with MeI, giving the hydroiodide, needles, of the N-methyl derivative, C12H23O2N, b21 139°. 4-Quinolyl ketones (cf. C. A., 7, 1196) which contain a Me or CH2 near the C: O or an alkoxy group in the 6-position, react at once with Br or Cl in Et2O, CS2 or mineral acids. Thus is obtained in 90% yield bromomethyl 6-ethoxy-4-quinolyl ketone from 40 g. of the Me ketone treated in 200 cc. of 48.5% HBr at 50-60° with 31 g. Br in the vapor form. It forms yellow needles or felted threads, m. 99-100° with decompose (104-5° if heated slowly). Hydrobromide, m.207°. Hydrochloride, S-yellow needles, m. 190°. With amines in C6H6 or Et2O these salts form, generally at room temperature and in 1-2 hrs., the amino ketones. Piperidinomethyl ketone, light yellow leaflets, m. 158°; best isolated as the monohydrobromide, m. 189-90° (yield, 75%), which forms neutral yellow solns. in H2O and alc.; the addition of a 2nd mol. of acid makes it much more soluble and it is then acid in reaction. The ketone is quite toxic; in small doses it strongly contracts the vessels, acts as a narcotic and produces strong dilation of the pupil. Diethylaminomethyl ketone, m. 131°. Neutral monohydrobromide, needles; yellow acid dihydrobromide, m. 193-4° (decompose). Dimethylaminomethyl ketone, yellow prismatic columns, m. 132°; isolated as the hydrobromide, powdery precipitate, m. 130-40° (decompose); yield, 66%. By the Paal-Skita method, these ketones are reduced to the carbinols which show a perfect analogy with the natural alkaloids, giving the thalleioquine reaction and showing the blue fluorescence. βPiperidino-α-hydroxy-6-ethoxyquinolyl-4-ethane, needles, and plates, m. 85° (yield, 85%), gives with Cl-H2O and NH3 an emerald-green color, forms neutral monoacid and acid diacid salts; 0.1-0.2 g. doses have a marked febrifugal action on men; Paramecium caudatum. and other infusorians are quickly killed by 1 : 1000 solns.; with toxic doses rabbits show the same symptoms as with quinine. β-Diethylamino derivative, from the ketone with Zn dust in AcOH, faintly yellow oil; dihydrochloride, needles, m. 171°. By the Paal-Skita method is obtained a small amount of a substance m. 165-6° which is tasteless and shows no fluorescence in acids.

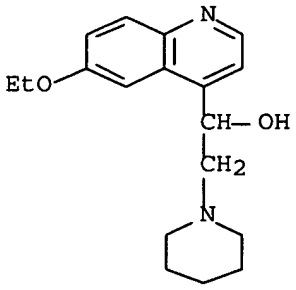
Controlled or Index Terms

859959-48-1, 4-Quinolinecarbinol, 6-ethoxy-α-(1-piperidylmethyl)-
(preparation of)

Hit Structure

CAS Registry Number
859959-48-1 CA

Chemical or Trade Name
4-Quinolinecarbinol, 6-ethoxy-α-(1-piperidylmethyl)- (1CI) (CA INDEX NAME)



Original Reference
7:2938g-i,2939a-e

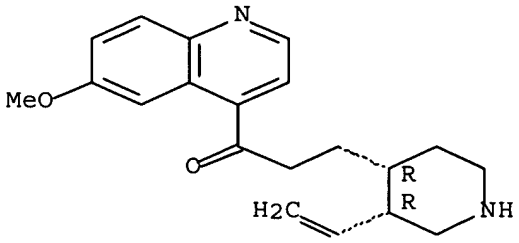
L12 ANSWER 78 OF 78 CA COPYRIGHT 2006 ACS on STN
Accession Number
1:11164 CA Full-text
Title
Conversion of Narcotine Into Nornarceine: Contribution to Our Knowledge of Quinatoxine
Author/Inventor
Rabe, Paul
Patent Assignee/Corporate Source
Chem. Inst., Univ. Jena
Source
Berichte der Deutschen Chemischen Gesellschaft (1907), 40, 3280-87 CODEN: BDCGAS; ISSN: 0365-9496
Document Type
Journal
Language
Unavailable
Graphics
For diagram(s), see printed CA Issue.
Abstract
Cinchonine, for which the author favors the formula,HC-CH2.CH2.N-, with chromic anhydride yields a compound, C19H20ON2; pale yellow, rhombic plates, or needles, m. 126-127°. Boiling dilute AcOH converts it into the keto base cinchotoxine (cinchonicine). In a similar manner narcotine is converted probably, first into gnoscopine, which is then resolved further on the other hand, into cotarnine and meconine, and on the other hand, into the keto-base nornarceine, H2 C6H2(CH2CH2NHMe) CH2COC4H2(OMe)2CO2H. It appears, therefore, that cinchonine and narcotine, or rather its alkali salts, contain the group NCHCHOH, in commom. Narcotine (43 g.), when treated in the manner described yields gnoscopine (4 g.), cotarnine and unchanged narcotine (9 g. each), meconine (7 g.), resin (about 8 g.) and nornarceine (6 g.). This last compound is optically inactive and resembles narceine closely. It is precipitated from alkaline solutions by CO2 in soft, colorless, silky lustrous, interlaced needles containing 3H2O, m. and decomposes 205-222°. The anhydrous compound is very hygroscopic, and decomposes 147 °. From EtOH each form yields prismatic crystals m. and decomposes 229°. These prisms have the same composition as the anhydrous material and this yield the hydrated needles by treatment with water. Hydrochloride, colorless prismatic rods with 1H2O, m. 144° Oxime, rhombic plates, m. 171°. Oxime anhydride, yellow and plastic. Oxime anhydride hydrochloride, crystallizes with 1EtOH. m. 138° With MeI and MeONa nornarceine yields the methiodide of narceine methyl ester. Dilute AcOH does not attack it after prolonged boiling. Gnoscopine m. 232-233°; with dilute AcOH, after 72 hours, 3 g. yielded 0.8 g. each of cotarnine and meconine, 0.6 g. nornarceine, 0.25 g. of unchanged gnoscopine and about 0.5 g. of resin.
Controlled or Index Terms
84-55-9, Quinotoxine

(preparation of)

Hit Structure

CAS Registry Number
84-55-9 CA

Chemical or Trade Name
1-Propanone, 3-[(3R,4R)-3-ethenyl-4-piperidinyl]-1-(6-methoxy-4-quinolinyl)- (9CI) (CA INDEX NAME)



Stereochemistry
Absolute stereochemistry.

Original Reference
1:2710h-i,2711a-e

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L9              25 S L7 AND L8
L10            201 S L7 NOT L9
L11            183 S L10 AND PY<2003
L12             78 S L11 AND (DRUG? OR TREAT?)

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---Logging off of STN---


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